
National Park Service
Cultural Landscapes Inventory
2009



George Washington Memorial Parkway - North
George Washington Memorial Parkway

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Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the NPS in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2006), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or

treatment guidelines for the cultural landscape.

Inventory Unit Description:

The cultural landscape of the north section of George Washington Memorial Parkway (GWMP – North) comprises a total of 1,139 acres along Virginia’s Potomac River shore that create a corridor to the north and west of Washington, DC. It is a component landscape of the George Washington Memorial Parkway (GWMP), a scenic, landscaped roadway that encompasses approximately 7,146 acres and extends along 38.3 miles adjacent to the Potomac River in Arlington and Fairfax Counties, Virginia, Washington, DC, and Montgomery County, Maryland (Figure 1). The southern portion of this roadway is along the western shore, or Virginia side, of the Potomac River and was the first to be built. This section was historically known as the Mount Vernon Memorial Highway (MVMH), and extends 15.2 miles from the Arlington Memorial Bridge in Washington, DC to President George Washington’s former home, Mount Vernon, in Virginia. The section of the GWMP located to the north and west of Washington, DC and along the eastern shore, or Maryland side, of the Potomac River is referred to as the Clara Barton Parkway (CLBA), and extends approximately 6.6 miles from the Chain Bridge in Washington, DC north to MacArthur Boulevard in Maryland. The section of parkway that runs parallel to this one, on the Virginia side of the river, is for the purposes of this inventory called GWMP – North and extends roughly 7.5 miles north to the Capital Beltway/Interstate 495. Although the 1995 National Register of Historic Places Nomination identifies the Arlington Memorial Bridge as the southern terminus of the “north section” of the GWMP, for the purposes of this Cultural Landscape Inventory (CLI) this landscape encompasses only the section of the GWMP extending from the intersection with Spout Run Parkway north to the Capital Beltway.

The GWMP consists of a four-lane roadway divided by a variable-width median. Much of the parkway is set against the backdrop of Washington, DC, which can be seen across the Potomac River as the road continues along the shoreline and past the nation’s capital. After passing the capital to the east, the north section of the GWMP becomes a gently rolling, curving roadway framed with views of the Potomac River Gorge, Georgetown, the distant city center and a series of forested areas. As one of several planned parkways in the Washington, DC area, the GWMP offers a distinctive blend of natural components and designed landscape that together provide a welcome escape from the city’s urban environment.

The MVMH section of the GWMP was developed as a memorial to the first president of the United States, George Washington. Although construction did not begin until 1928, the concept of a roadway from Washington, DC to Mount Vernon first appeared as early as 1888. The highway was aptly completed in 1932, a date that commemorated the bicentennial of George Washington’s birth. As plans and construction of the new roadway advanced, it served as an inspiration for further action, and on May 29, 1930, President Herbert Hoover signed what became known as the Capper-Cramton Act. This legislation authorized funds for an expanded parkway along both shores of the Potomac that would include the MVMH and be known as the George Washington Memorial Parkway. Though at first progress was slow, due in part to the impact of the Great Depression and World War II, the acquisition of land gradually stretched north along the river, and work on the GWMP advanced. Over the years, Frederick Law Olmsted, Jr. (in his capacity on the National Capital Planning Commission) and other landscape architects from the National Park Service and the Commission of Fine Arts contributed to the emerging parkway, and by 1963 the last bridge of the parkway’s north section was complete.

Extending from the Spout Run Parkway intersection to the Capital Beltway, the topography of GWMP – North makes for a dramatic drive characterized by gentle curves and rolling hills. Thanks to the attention given to views in the Capper-Cramton Act, planners and engineers devoted special care to the preservation of historic vistas through the management of vegetation and small-scale features along the road. Bridges, natural systems, and circulation features all contribute to the framing and context of various vistas along the corridor, although some of these views have been compromised by the energetic growth of vegetation in recent years. The Route 123 Overpass, built to span the GWMP between 1957 and 1959, was the region's first pre-stressed concrete girder bridge, while the cloverleaf design used for the Route 123 Interchange was highly innovative for its 1950s construction. The consistent utilization of advanced engineering was thus an important theme throughout the construction of GWMP – North.

The original portion of the GWMP, or the MVMH, was listed in the National Register of Historic Places in 1981. The section of parkway north of Memorial Bridge, including GWMP – North and the CLBA north to the Capital Beltway, was approved for listing in the National Register in 1995, as part of a multiple property nomination entitled "Parkways of the National Capital Region." The GWMP – North cultural landscape is significant under National Register of Historic Places Criterion A, for its association with the broader planning of Washington, DC, for its engineering as a late example of parkway construction, and for its employment of early 1950s engineering and transportation innovations. It is also significant under Criterion B, for its historical and commemorative associations with George Washington. Lastly, this section of the parkway is significant under Criterion C for its thorough, well-designed landscape architecture. The period of significance for GWMP – North is 1930 to 1963, beginning with the commitment of the Federal government to authorize its funding through the Capper-Cramton Act, and ending with the completion of the last bridge of the parkway at Dead Run.

Although the GWMP has undergone certain alterations in order to meet safety guidelines in recent years, the parkway's north section retains a high level of integrity to its historic period of significance. From its earliest days of use, the GWMP has been perceived as a scenic, park-like transportation route for travelers, as well as a recreational and environmental conservation area. The end result of this vision is a natural setting that has not only been preserved, but serves to enhance the carefully designed historic landscape of the roadway. Today, the parkway serves as a major transportation artery in northern Virginia, providing access to Washington, DC, Arlington County, Fairfax County, and the City of Alexandria. Still, despite the higher speeds and volume of traffic, commuters and visitors alike continue to appreciate the beautiful and iconic views of the capital and its surroundings from the comfort of their own car. Captivating glimpses of the Potomac River Gorge, Georgetown, the Lincoln Memorial and the Washington Monument offer a refreshing contrast to the grey, urban environment of Washington, DC. As a result, the scenic, historic and recreational setting of the parkway continues to offer travelers much more than convenience.

Site Plan

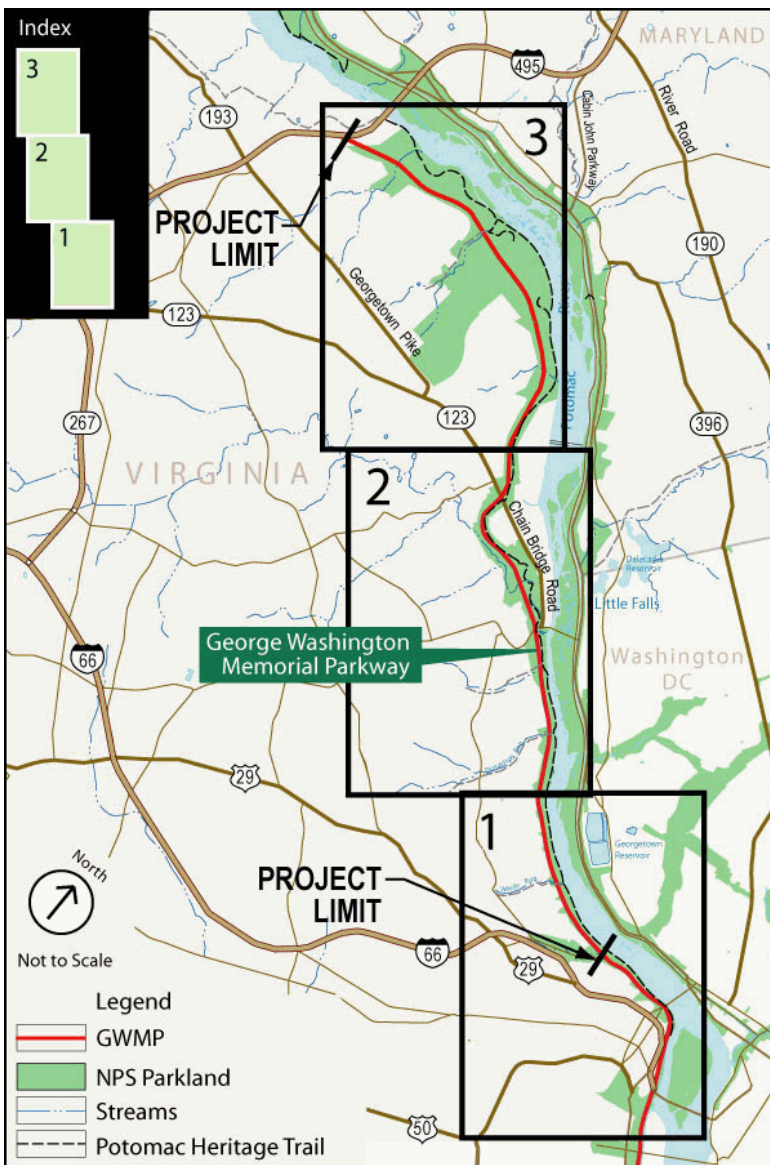


Figure 1. Additional maps throughout the CLI utilize this index map to illustrate numerous contributing and non-contributing characteristics and features.

Property Level and CLI Numbers

| | |
|-----------------------------------|--|
| Inventory Unit Name: | George Washington Memorial Parkway - North |
| Property Level: | Landscape |
| CLI Identification Number: | 600170 |
| Parent Landscape: | 600170 |

Park Information

| | |
|----------------------------------|--|
| Park Name and Alpha Code: | George Washington Memorial Parkway -GWMP |
| Park Organization Code: | 3300 |
| Park Administrative Unit: | George Washington Memorial Parkway |

CLI Hierarchy Description

The north section of the GWMP is a natural and cultural component landscape whose parent landscape is the GWMP. The construction of the GWMP commemorated George Washington's life and encompassed certain areas to which his life was closely linked. These included his home; his adopted home town of Alexandria where he worshipped, voted, and belonged to the Masonic Lodge; and Great Falls, where he was instrumental in developing the Patowmack Canal.

The GWMP was built in sections, as the necessary financial resources became available to purchase the properties located along its route. The north section of the GWMP was one of the later phases in this process, and was built in two distinct sections from Spout Run to the CIA Interchange (from 1956 to 1959) and from the CIA Interchange to the Capital Beltway (from 1959 to 1963). Through consultation with the project team for this CLI, consisting of National Capital Region's cultural landscape architect, the GWMP cultural resources manager and landscape architect, and a cultural resources technical representative from the Denver Service Center, the limits of GWMP – North were determined. The resulting document includes all portions of the Park that are within the existing National Register boundary, with as much detail as limited time and budget would allow to document the landscape features of Turkey Run Park and Fort Marcy. Both of these sites are component landscapes of GWMP – North, and both contribute to the significance of this section of the parkway.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

This CLI was completed in 2009 by Emily Donaldson, Landscape Historian for the National Capital Region of the National Park Service. It provides documentation of the historic landscape resources associated with the north section of the George Washington Memorial Parkway (GWMP). Much has been written about the GWMP, especially the original portion, or the Mount Vernon Memorial Highway (MVMH), including a detailed 1990s study by the Historical American Engineering Record (HAER). A draft version of the CLI by Greenhorne & O'Mara, Inc. was heavily utilized in the preparation of this document, and field investigations were completed by them in May of 2007 and by the NPS in July of 2009. Archival research was conducted at the NPS Museum Resource Center, the Washingtoniana Room at the Martin Luther King Public Library of the District of Columbia, the Kiplinger Library at the Historical Society of Washington DC, and among the NPS National Capital Region files.

Matthew Virta, Cultural Resources Manager for George Washington Memorial Parkway, provided valuable comments during the inventory process. Key support was also provided by the staff of the National Capital Region, including Maureen Joseph, Regional Historical Landscape Architect, and Martha Temkin, CLI Coordinator.

Concurrence Status:

| | |
|---|--|
| Park Superintendent Concurrence: | Yes |
| Park Superintendent Date of Concurrence: | 09/02/2009 |
| National Register Concurrence: | Eligible -- SHPO Consensus Determination |
| Date of Concurrence Determination: | 09/02/2009 |

Concurrence Graphic Information:

George Washington Memorial Parkway - North
George Washington Memorial Parkway



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

August 5, 2009

Memorandum:

To: Regional Landscape Architect, National Capital Region
From: Superintendent, George Washington Memorial Parkway
Subject: Statement of Concurrence, George Washington Memorial Parkway - North Cultural Landscapes Inventory

I, Dottie P. Marshall, Superintendent of George Washington Memorial Parkway, concur with the findings of the Cultural Landscape Inventory for George Washington Memorial Parkway - North, including the following specific components:

MANAGEMENT CATEGORY: Must Be Preserved and Maintained

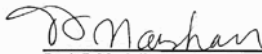
CONDITION ASSESSMENT: Fair

Good: indicates the inventory unit shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The inventory unit's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition.

Fair: indicates the inventory unit shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the character defining elements, will cause the inventory unit to degrade to a poor condition.


Poor: indicates the inventory unit shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

The Cultural Landscapes Inventory for George Washington Memorial Parkway - North is hereby approved and accepted.


Dottie P. Marshall
Superintendent, George Washington Memorial Parkway


Date

Concurrence letter from the superintendent of George Washington Memorial Parkway, dated September 2, 2009.

 United States Department of the Interior
NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

August 5, 2009


Memorandum

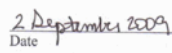
To: Cultural Landscapes Inventory Coordinator, National Capital Region

From: State Historic Preservation Officer, Virginia State Historic Preservation Office

Subject: Statement of Concurrence, George Washington Memorial Parkway – North Cultural Landscapes Inventory

M. Amanda Lee, Historic Preservationist, Virginia Department of Historic Resources for I, Kathleen Kilpatrick, Virginia State Historic Preservation Officer, concur with the findings of the George Washington Memorial Parkway – North CLI as submitted on August 5, 2009.


Kathleen Kilpatrick M. Amanda Lee
for Virginia
State Historic Preservation Officer


Date 2 September 2009

Please provide two (2) bound copies of the final report to our office, once the final report is available. Should you have any questions, I may be reached via email at amanda.lee@dhr.virginia.gov or by phone at 804.317.2323 x122.

Letter of concurrence from the Virginia State Historic Preservation Office, dated September 2, 2009.

Geographic Information & Location Map

Inventory Unit Boundary Description:

The Inventory Unit Boundary is coterminous with the existing National Register of Historic Places Boundary for the north section of the George Washington Memorial Parkway (GWMP), and encompasses 1,139 acres in Arlington County, Virginia. This landscape includes the Virginia side of the GWMP from its northernmost point at the intersection with Capital Beltway/ Interstate 495 south to the Spout Run Parkway (Figure 2). The boundary of the cultural landscape includes the main parkway corridor and immediate shoulders, and extends out to thirty feet on either side of the center line between the northbound and southbound lanes. The sole exceptions to this rule are the drainage inlets and outfalls of the roadway, which reach outside of this area but are included in the cultural landscape.

George Washington Memorial Parkway - North

George Washington Memorial Parkway

Stationing is used in this document to describe the location of features within GWMP - North. Stationing is a linear measurement along the horizontal alignment of roadways that is commonly used in their engineering. Stationing begins at a project boundary, where a stationing number is assigned, and then continues with additional stationing numbers assigned every 100 feet for the duration of the roadway. On the GWMP, these numbers differ for northbound and southbound lanes. The stationing used for this document was taken from George Washington Memorial Parkway North Section Improvements, completed by EarthTech in 2006. Stationing for the northbound lanes begins with station number 595.00.00, approximately 1500 feet north of the bridge over Dead Run, and ends with station number 1000.00.00 at the Spout Run exit ramp. Stationing for the southbound lanes begins with station number 95.00.00, located 1,600 feet north of the bridge over Dead Run, and ends with station number 500.00.00 at the Spout Run entrance ramp to the GWMP.

State and County:

State: VA
County: Arlington County
State: VA
County: Fairfax County

Size (Acres): 1,139.00

Boundary UTMS:

| | |
|-----------------------|------------------------------|
| Source: | GPS-Differentially Corrected |
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 311,209 |
| UTM Northing: | 4,315,479 |
| Source: | GPS-Differentially Corrected |
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 316,096 |
| UTM Northing: | 4,311,471 |
| Source: | GPS-Differentially Corrected |
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 3,157,850 |
| UTM Northing: | 4,311,175 |
| Source: | GPS-Differentially Corrected |
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 313,759 |
| UTM Northing: | 4,314,388 |
| Source: | GPS-Differentially Corrected |

| | |
|-----------------------|------------------------------|
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 313,161 |
| UTM Northing: | 4,313,306 |
| Source: | GPS-Differentially Corrected |
| Type of Point: | Point |
| Datum: | NAD 83 |
| UTM Zone: | 18 |
| UTM Easting: | 311,077 |
| UTM Northing: | 4,314,955 |

George Washington Memorial Parkway - North

George Washington Memorial Parkway

Location Map:

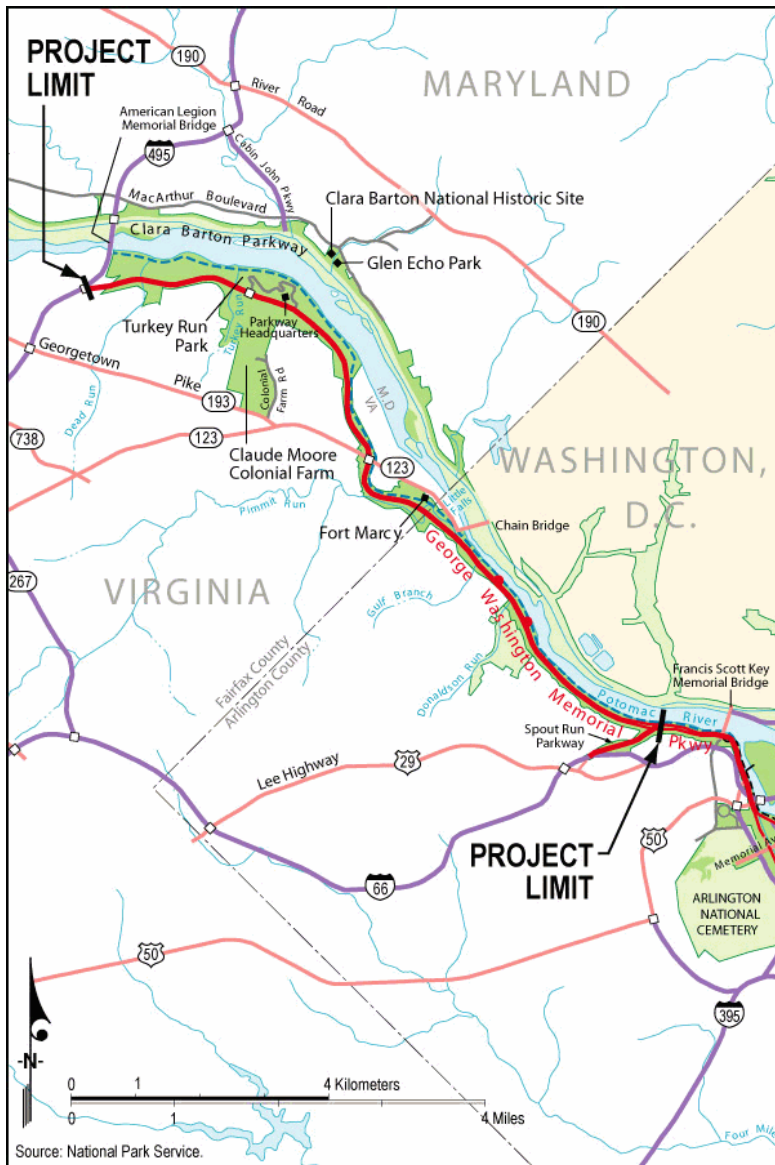


Figure 2. This project location map (NPS GIS 2008) displays GWMP, which flanks the Potomac River along the northern border of Virginia.

Management Unit: GWMP

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 09/02/2009

Management Category Explanatory Narrative:

The GWMP – North was listed on the National Register of Historic Places in 1995. Therein it was identified as significant for landscape architecture and association and commemoration of George Washington. The parkway serves as an important historic and recreational touring roadway as well as a commuter route. The Management Category Date records the date on which the most recent National Register Nomination for the GWMP was approved.

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement: Special Use Permit

Expiration Date: NA

Management Agreement Explanatory Narrative:

A concession contract/permit is available to commercial vehicles for access to the north section of the George Washington Memorial Parkway, renewable on an annual basis.

Type of Agreement: Other Agreement

Expiration Date: NA

Management Agreement Explanatory Narrative:

A Programmatic Agreement exists between the National Park Service, the Federal Highway Administration, and the State Historic Preservation Officers for Maryland, Virginia and the District of Columbia that was signed in 1993. It agreed to the rehabilitation of the George Washington Memorial Parkway in Virginia, Maryland, and the District of Columbia in accordance with Section 106 of the National Historic Preservation Act, including work on guardrails, walls, barriers, bridges, intersections, acceleration/deceleration lanes, and landscaping.

Type of Agreement: Other Agreement

Expiration Date: NA

Management Agreement Explanatory Narrative:

A Temporary Amendment to the existing Programmatic Agreement of 1993 specifically addresses the installation of permanent stone-faced barriers, temporary median barriers, and other safety improvements along the GWMP. The Temporary Amendment was signed by the National Park Service, Federal Highway Administration, and the State Historic Preservation Officers for Maryland, Virginia and the District of Columbia in 1997, and was slated to expire in 2002.

NPS Legal Interest:

Type of Interest: Fee Simple

Explanatory Narrative:

In 1930, the Capper-Cramton Act authorized appropriations to purchase land for the GWMP and totaling \$7.5 million. This Act included the shores of the Potomac and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia side, with the exception of the City of Alexandria. The lands for the GWMP were gradually acquired for the United States through this Act by the National Capital Parks and Planning Commission (NCP&PC), and then turned over to the Office of Public Buildings and Public Parks (OPBPP) of the National Capital for administration. NCP&PC was further authorized to occupy federal lands needed for the GWMP, and to accept the donation of other lands that it deemed desirable for the GWMP (Mackintosh, 1996). The MVMH became part of the GWMP in this way, and was transferred to the OPBPP upon completion. In short, the Capper-Cramton Act and subsequent appropriations allowed the acquisition of this property by the NPS. In later years, another major impetus and source of funds were associated with the need to complete the north section of the GWMP to Langley, Virginia for the relocation of the CIA.

Public Access:

Type of Access: Unrestricted

Explanatory Narrative:

Public access to the GWMP - North property is unrestricted, and can be gained via the Capital Beltway/Interstate 495. Other access points are via the Route 123 interchange, Spout Run Parkway, and, to a limited extent, the Central Intelligence Agency (CIA) interchange. Other means of access to the parkway corridor include pedestrian paths via the Potomac Heritage Trail, which runs through the heavily wooded sections of the GWMP – North. Residents from nearby communities also access the parkway by way of local trails. The majority of trail use along the GWMP is recreational, though some of these routes are also used by bicycle commuters.

The GWMP is normally open 24 hours a day, year-round, though the adjacent GWMP visitor use areas are closed to the public between the hours of 10:00 PM and 6:00 AM unless otherwise posted. Certain other restrictions apply, as well (see associated Public Access to Site record).

Type of Access: Other Restrictions

Explanatory Narrative:

Commercial vehicles are prohibited access to GWMP - North unless they obtain a permit from the Park Superintendent. Trucks in excess of 10,000 pounds Gross Vehicle Weight are not allowed on the GWMP, while bicycles are not permitted on the road between Mt. Vernon Circle and I-495, although they are allowed to use the trails along it. Bicycles are also forbidden to use the Potomac Heritage Trail.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

George Washington Memorial Parkway - North

George Washington Memorial Parkway

The lands adjacent to the north section of the George Washington Memorial Parkway contribute to its overall significance as a cultural landscape. Fort Marcy and Turkey Run Park both contribute to the historic, wooded character of GWMP – North.

Turkey Run Park is considered one of the finest natural areas in the Potomac River Gorge because of its old-age forests and unusually diverse vegetation. Working in coordination with the NPS, ecologists from the Commonwealth of Virginia's Department of Conservation and Recreation have sampled and classified six different upland forest communities, one non-alluvial wetland, and seven riparian communities in Turkey Run Park. Stands of ten community types totaling 290 acres have been mapped as element occurrences, or stands that are considered significant due to their maturity, size, and/or overall quality. These unique vegetation communities cover extensive areas on the north side of the George Washington Memorial Parkway, and also extend to the south side in the vicinity of Turkey Run and Dead Run. Several of them are recognized as uncommon or rare, in either the state of Virginia or the world (VDCR 2005).

In addition, the Turkey Run Park area represents one of the highest quality stands of the upland forest community documented by Virginia Natural Heritage Program (VANHP) in the Piedmont of Virginia. A tree survey completed in the summer of 2007 found a wide range of species including: American beech (*Fagus grandifolia*), American elm (*Ulmus Americana*), American holly (*Ilex opaca*), black locust (*Robinia pseudoacacia*), black walnut (*Juglans nigra*), boxelder (*Acer negundo*), crabapple (*Malus* sp.), eastern redbud (*Cercis canadensis*), flowering dogwood (*Cornus florida*), hawthorn (*Crataegus* sp.), hickory (*Carya* sp.), mockernut hickory (*Carya tomentosa*), pin oak (*Quercus palustris*), eastern redcedar (*Juniperus virginiana*), red maple (*Acer rubrum*), red oak (*Quercus rubra*), sugar maple (*Acer saccharum*), tulip poplar (*Liriodendron tulipifera*), white ash (*Fraxinus americana*), white oak (*Quercus alba*), white pine (*Pinus strobus*), and American witch hazel (*Hamamelis virginiana*). Since the great majority of these species likely existed during the historic period of significance, and the estimated age of a number of the trees confirms their existence at that time, the vegetation of the Turkey Run Park area retains a high level of integrity and contributes to the historic character of GWMP – North as an adjacent property.

Fort Marcy is an important Civil War site built in 1861 and strategically situated near the Leesburg Turnpike and the Chain Bridge. Constructed on a hillside, the fort includes ramparts, parapets, rifle pits, and trenches. Although it did not see much action during the war, Fort Marcy was pivotal in the protection of Washington, DC and was often maintained on “alert” status in case of a threat to the capital city (National Park Service 2009).

To the north and east of GWMP – North, the broad and majestic Potomac River provides the various views for which the parkway has become famous. Much of the private property along either side of the roadway has been developed for residential use, but in such a way that these non-contributing structures are almost never visible from the parkway itself.

Along the Maryland side of the Potomac River are other historic resources including the Chesapeake and Ohio Canal, the Clara Barton House, and Glen Echo Park, all of which are cultural landscapes of

the GWMP. Beyond these features are historically significant viewsheds looking east and south to Washington, DC and Georgetown. These elements of the surrounding landscape, though not included in the boundaries of GWMP – North, contribute to the site’s historic character and significance. The importance of their role is emphasized by not only the very different feel of other nearby properties, such as the Capital Beltway and suburban McLean, Virginia to the north and west; but also those areas that have become more developed since the parkway’s construction and are within its viewshed, such as the neighborhoods of northwest DC (Figure 3).



Figure 3. Looking east over northbound lanes and historic stone masonry wall 5N, across the Potomac River to the Palisades neighborhood of northwest Washington, DC (NCR CLP 2009).

National Register Information

Existing NRIS Information:

| | |
|------------------------------------|--|
| Name in National Register: | George Washington Memorial Parkway |
| NRIS Number: | 95000605 |
| Other Names: | Parkways of the National Capital Region, NPS |
| Primary Certification Date: | 06/02/1995 |

Significance Criteria: B - Associated with lives of persons significant in our past

Significance Criteria: C - Embodies distinctive construction, work of master, or high artistic values

Criteria Considerations: F -- A commemorative property
G -- A property less than 50 years of age

Period of Significance:

| | |
|--------------------------------|---|
| Time Period: | AD 1930 - 1966 |
| Historic Context Theme: | Developing the American Economy |
| Subtheme: | Transportation by Land and Air |
| Facet: | Planned Roads, Highways and Freeways |
| Time Period: | AD 1930 - 1966 |
| Historic Context Theme: | Expressing Cultural Values |
| Subtheme: | Landscape Architecture |
| Facet: | Development Of Transportation And Land Tenure Systems |
| Time Period: | AD 1930 - 1966 |
| Historic Context Theme: | Transforming the Environment |
| Subtheme: | Conservation of Natural Resources |
| Facet: | Scenic Preservation |

Area of Significance:

Area of Significance Category: Transportation

Area of Significance Category: Landscape Architecture

Area of Significance Category: Other

Statement of Significance:

Application of the National Register for Historic Places Criteria for Evaluation to the cultural landscape of the GWMP – North reveals that it is nationally significant under Criteria A, B, and C for its unique associations with the history of Washington, DC and one of the nation's greatest leaders. First, it is significant under Criterion A for its association with the broader planning of Washington, DC, for its engineering as a late example of Parkway construction, and for its employment of early 1950s engineering and transportation innovations. This landscape is also significant under Criterion B, for its historical and commemorative associations with George Washington. Lastly, GWMP – North is significant under Criterion C for its unique landscape architecture, whose carefully engineered topography, vegetation, and small-scale features still provide both commuter and recreational drivers with designed views that showcase the capital's monumental core.

The period of significance for the north section of the GWMP is from 1930 to 1963, beginning with the Federal government's authorization of funding to expand the existing MVMH through the Capper-Cramton Act, and ending with the completion of the last bridge along GWMP – North, at Dead Run. This section of the GWMP was built in two distinct sections, from Spout Run to the CIA Interchange, between 1956 and 1959, and from there to the Capital Beltway, between 1959 and 1963. Its innovative engineering, unique architecture and landscape design continue to illustrate the character of parkways from this period, and thus represent the development of both materials and ideas in our nation's history.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Designed

Current and Historic Use/Function:

Primary Historic Function: Automobile

Primary Current Use: Automobile

Other Use/Function

Outdoor Recreation

Other Type of Use or Function

Both Current And Historic

Current and Historic Names:

Name

George Washington Memorial Parkway

Type of Name

Both Current And Historic

Ethnographic Study Conducted:

No Survey Conducted

Chronology:

| Year | Event | Annotation |
|----------------|--------------|---|
| AD 1861 | Built | Fort Marcy is constructed along the Georgetown & Leesburg Turnpike north of the Chain Bridge. Thanks to its strategic position, the fort guards this major roadway, and its access to the capital via the bridge over the Potomac River, against the threat of Confederate forces to the south. |
| AD 1887 - 1888 | Established | The Mount Vernon Avenue Association (MVAA) is formed to promote travel to Mount Vernon, the home of George Washington. The organization also aims to improve the region's roads and to address the needs of tourists bound for Mount Vernon. |
| AD 1890 | Designed | The U.S. Army Corps of Engineers (COE) surveys and reports on three alternative routes for travel to Mount Vernon. |
| AD 1901 - 1902 | Designed | The Report of the Senate Park Commission, known as the McMillan Commission, recommends a series of drives and park connections around Washington, DC. |
| AD 1922 | Designed | The Bureau of Public Roads (BPR) conducts a reconnaissance survey in order to lay out, construct, and maintain Mount Vernon Avenue with an 80-foot minimum right-of-way. |
| AD 1926 | Established | Congress creates the National Capital Parks and Planning Commission (NCP& PC) to preserve forest and natural scenery and to provide for the systematic and continuous development of parkway systems in the National Capital and its environs. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1926 - 1932 | Built | Arlington Memorial Bridge is constructed during these years. |
| AD 1927 | Designed | The McMillan Commission report to Congress recommends two separate roads, a largely inland route extending 12.5 miles and a 14.6-mile route along the river. The Commission of Fine Arts (CFA) and the NCP&PC endorse the latter alternative. |
| | Designed | The Federal Power Commission (FPC) seeks NCP& PC review of a proposed hydroelectric project. NCP& PC planner Charles Eliot reports that the proposed dams above Chain Bridge would thwart the parkway project under consideration. |
| AD 1928 | Established | In May, Michigan Representative Louis C. Cramton first introduces legislation directing the FPC to withhold any permits for water power development in the Potomac until Congress receives reports from NCP&PC. |
| | Established | On May 23, Congress authorizes the Secretary of Agriculture, in cooperation with the GW Bicentennial Commission, to plan, construct, control and maintain a sustainable memorial highway to connect Mount Vernon with the south end of the Arlington Memorial Bridge, or the future Mount Vernon Memorial Highway. |
| AD 1928 - 1932 | Built | The BPR builds and completes the Mount Vernon Memorial Highway in time to commemorate the 200th anniversary of George Washington's birth. The official dedication occurs on November 15, 1932. The project preserves the natural scenery but also demonstrates the principles of modern highway design, which promises to help accommodate the rapidly growing tourist and commuter traffic. |
| AD 1930 | Established | On May 29, President Herbert Hoover signs the Capper-Cramton Act, which authorizes appropriations for an expanded parkway to be known as George Washington Memorial Parkway (GWMP). |
| AD 1930 - 1935 | Developed | The Department of the Interior and the National Park Service codify the precise meaning of the term, "parkway," and develop a series of design criteria for federal parkway projects. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1930 - 1950 | Built | Development of the GWMP continues throughout the 1930s, extending north through land acquisitions and gradual construction to the newly-built Arlington Memorial Bridge, Virginia Route 50, and the Francis Scott Key Bridge to eventually reach the intersection with Spout Run Parkway. Landscape architect Frederick Law Olmsted, Jr. acts as a consultant on the basic location and alignment of the new roadway. |
| AD 1931 | Built | In October, the portion of the parkway to the south of Alexandria is opened to traffic. |
| | Planned | Congress approves a one-million dollar outlay for the NCP&PC, \$237,700 of which is allocated to the development of the GWMP with the goal of expanding the parkway over a period of six years. |
| AD 1932 | Developed | A motorcade and unofficial dedication by President Hoover on January 16 marks the opening of the existing GWMP to traffic. |
| | Developed | On November 15, a formal dedication ceremony is held for the GWMP. |
| AD 1933 | Established | On June 10, President Franklin D. Roosevelt abolishes the NCP&PC of the National Capital, transferring its functions to the National Park Service (NPS). From this point on, the NPS manages what is collectively known as the National Capital Parks, including the GWMP. |
| AD 1934 | Designed | The Secretary of NCP&PC writes the NPS director, urging swift action by the NPS to build a road from the Memorial Bridge to the Francis Scott Key Bridge, and further north to Spout Run. |
| | Designed | The BPR begins surveying for the GWMP between the Memorial Bridge and Great Falls, Virginia. |
| | Designed | In April, representatives of the NCP& PC, the NPS, and the CFA meet to discuss plans for what had until that point been envisioned as a single, undivided roadway. CFA landscape architect Gilmore T. Clarke instead recommends two separate drives, with a northbound lane running along the water's edge and a southbound lane along the top of the palisades. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1936 | Land Transfer | The Joseph Leiter Estate, containing 167 acres of frontage along the Potomac River, is obtained by the National Park Service. |
| | Built | A portion of the former Leiter Estate close to the future CIA-GWMP Interchange is developed into a picnic area by the Civilian Conservation Corps (CCC). This includes the construction of trails, picnic benches, and fireplaces. |
| AD 1941 | Planned | While the Pentagon is under construction Frederic A. Delano, Chairman of the NCP& PC, requests \$200,000 to expand and improve the GWMP from Spout Run to Chain Bridge. Congress approves the funds, but the matching state funds required under the Capper-Cramton Act are not provided. |
| | Planned | The Department of the Interior's (DOI) appropriation bill includes funds for the development of the GWMP, the Blue Ridge Parkway, and the Natchez Trace Parkway. |
| AD 1947 | Designed | The NCP&PC completes land acquisition for the GWMP from the Francis Scott Key Bridge west to Spout Run and the Spout Run Parkway branch to Lorcom Lane. |
| AD 1948 | Designed | The NCP&PC obtains another \$200,000 in appropriations for the GWMP. It further urges Arlington County to provide its share of matching funds, for purchase of the Smoot Sand and Gravel Company and the parkway extension this would allow, all the way to the Fairfax County line. |
| AD 1950 | Expanded | In May, extension of the GWMP to the Spout Run Parkway is completed. |
| | Planned | The State, County, and NCP& PC agree to spend \$600,000 over the coming two years, to improve Arlington's river frontage. |
| | Designed | The design prototype for the Windy Run, Donaldson Run, and Gulf Run Bridges, known as the Steel and Concrete Bridge, is drawn up by National Park Service architect William Haussman. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1953 | Designed | The Senate Committee on Appropriations obtains \$100,000,000 to acquire land between the Fairfax County line and Chain Bridge Road. |
| AD 1954 | Designed | The Federal-Aid Highway Act provides parkway construction contract authorization for three fiscal years, from 1955 to 1957, thereby enabling the NPS to program parkway construction. |
| AD 1954 - 1955 | Planned | In the fiscal year of 1955, the NCPC requests and obtains \$135,000,000, a sum which includes \$110,000 to acquire the land between Route 123 and the Leiter Tract. |
| AD 1955 | Planned | NPS Direct Conrad Wirth states that one of the most important Mission 66 Program projects in the National Capital area is the GWMP. |
| | Planned | The Federal-Aid Highway Act authorizes the Director of the CIA to acquire lands and construct facilities and access roads for the proposed CIA Headquarters facility, to be built on the BPR property at Langley. As a result, 8.5 million dollars are transferred to the NCPC and the DOI, to provide for the GWMP's extension north to Langley. |
| | Designed | With the development of the Langley Tract, planners' views of the parkway begin to shift. The road comes to be seen not only as a recreational area, but also as an active piece in the network of commuter access options available to drivers in greater Washington, DC. |
| | Designed | Designs for the Pimmit Run Bridge are drawn up for the first time by Bureau of Public Roads Regional Engineer A.F. Ghiglione and National Park Service architect William Haussman. |
| AD 1956 | Designed | The Glebe Road Bridge is designed by the Bureau of Public Roads. |
| | Designed | The Lower Level Spout Run Bridge (also known as Spout Run Bridge Northbound) is designed by Bureau of Public Roads engineers, in collaboration with the National Park Service. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1956 - 1957 | Planned | For fiscal year 1957, Congress appropriates \$438,000 to the NCPC under the Capper-Cramton Act, for the acquisition of land between the BPR Tract near Langley and the Capital Beltway. |
| AD 1956 - 1958 | Built | In October, construction begins on the roadway extension to the new CIA Headquarters. Taylor and Keebler, Inc. of Clinton, Maryland, receives the contract for grading, drainage, and construction of bridge abutments on a 2.37 mile section of parkway between Spout Run and Chain Bridge, which continues for the succeeding two years. |
| AD 1957 | Designed | The Spout Run Arch Bridge (also known as High Level Spout Run Bridge) is designed by H.J. Spelman and R.H. Wood, of the Bureau of Public Roads, and William Haussman of the National Park Service. |
| | Designed | Engineering plans for the Windy Run Bridge are completed by the Bureau of Public Roads. |
| | Designed | The Route 123 Overpass is designed by the Bureau of Public Roads. |
| AD 1957 - 1958 | Built | The Lower Level Spout Run Bridge, a reinforced concrete rigid frame arch bridge, is constructed at the intersection with the Spout Run Parkway to carry two lanes of northbound GWMP traffic. |
| AD 1957 - 1959 | Built | The Route 123 Overpass, Glebe Road Bridge and Gulf Branch Bridge are built during this period, to carry connecting roads over the GWMP and into northern Virginia. |
| AD 1957 - 1963 | Designed | The Turkey Run and Dead Run Bridges are designed by the National Park Service and the Bureau of Public Roads. |
| AD 1958 | Planned | Construction contracts are let for the Spout Run, Windy Run, Donaldson Run, Gulf Branch, Glebe Road, and Pimmit Run bridges. |
| | Built | Newton Asphalt Company of Alexandria and Contee Sand and Gravel Company of Laurel are awarded contracts to pave the 5.5 miles of road from Spout Run to the CIA Interchange. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1958 - 1959 | Built | To the north of Spout Run, the Windy Run Bridge, Donaldson Run Bridge, and Gulf Run Bridge are built in a combined project by Blackwell Engineering Co. The steel superstructures of all three bridges are fabricated and erected by the Atlas Machine and Iron Works of Arlington, Virginia. |
| | Built | The Spout Run Arch Bridge is constructed by the Capital Engineering Company of DC. It carries the southbound lanes of the GWMP over Spout Run, and is the first bridge of the GWMP that breaks with the rustic aesthetic previously used in parkway bridges. |
| AD 1959 | Built | To the north of Gulf Branch, the Glebe Road Bridge is built to carry traffic over Glebe Road and an unnamed tributary of Pimmit Run. Contractors involved in its construction include L.B. Foster Company, Howat Concrete Company, Phoenix Bridge Company, and the Wright Construction Company. |
| | Built | To the north of Glebe Road, the Pimmit Run Bridge is built to carry traffic over Pimmit Run. |
| | Built | The CIA Overpass is completed, and this new section of the GWMP is opened to carry traffic to the CIA Interchange. |
| | Built | In November, President Eisenhower participates in laying the cornerstone at the CIA building, and in a Ribbon Cutting Ceremony for the opening of the extension between Spout Run Parkway and the CIA Headquarters. |
| | Built | Construction of several bridges north of Spout Run is completed, including the Windy Run Bridge and Donaldson Run Bridge. |
| | Expanded | The latest section of the GWMP is completed, and carries traffic to the CIA Interchange in Langley, Virginia. |
| AD 1959 - 1960 | Planned | Congress appropriates \$62,000 under the Capper-Cramton Act for construction of the Turkey Run and Dead Run Bridges. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1960 | Altered | Representative Joel T. Broyhill of Virginia wants to change the speed limit of the GWMP from 40 to 50 mph. The NPS insists that the road is a park road, but Broyhill contends that it is a commuter route. The NPS decides not to fight Congress on this issue. |
| AD 1960 - 1961 | Built | The Turkey Run Bridge is built by the Case Construction Company as part of the GWMP extension to the Capital Beltway. |
| AD 1961 - 1962 | Built | Newton Asphalt Company completes the paving work for \$977,843. This includes a mile of road and four parking areas for Turkey Run Recreation Area. |
| AD 1960 - 1963 | Built | The Dead Run Bridge, spanning Dead Run just south of the Capital Beltway, is built by the Case Construction Company and this final, northern-most section of the parkway is opened to traffic. |
| AD 1962 | Expanded | In December, the last and northern-most section of the GWMP is opened to traffic, carrying motorists all the way to the Capital Beltway. |
| AD 1972 | Altered | For safety purposes, the original aluminum guardrails of the Route 123 Overpass are removed and replaced with a concrete parapet. |
| | Altered | New concrete parapet walls are installed beneath the original aluminum guardrails to improve safety conditions at the Pimmit Run Bridge. |
| AD 1974 | Rehabilitated | The original 6.5-foot asphalt deck of the Dead Run Bridge is replaced with a new 8.25-foot deck, due to the infiltration of roadway salts. |
| AD 1976 | Rehabilitated | The deck of the Turkey Run Bridge is repaired and a cathodic protection system is installed in order to prevent corrosion. This project is an early example of cathodic protection being applied to architectural structures. |
| | Altered | A cathodic protection system is installed in the Dead Run Bridge, to prevent corrosion. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1982 | Reconstructed | The Glebe Road Bridge undergoes reconstruction, including the replacement of its original aluminum parapet railings with steel ones, the replacement of the deck, and the elimination of the sidewalks. |
| AD 1985 | Reconstructed | The Route 123 Overpass is reconstructed. |
| AD 1987 | Land Transfer | The NPS returns a tract of land north of the Capital Beltway to private ownership. This event is seen as the final decision that the GWMP will not extend to Great Falls, as was originally intended. |
| AD 1991 | Altered | The Spout Run Arch Bridge is redecked and renovated, including the reduction of the sidewalk widths. The Lower Level Spout Run Bridge is also widened around the same time, which results in the elimination of its sidewalks. |
| AD 1995 - 1998 | Rehabilitated | The decks of both the Turkey Run Bridge and the Dead Run Bridge are replaced. |
| | Altered | Concrete core, stone faced masonry median barriers and wing walls are installed on the Turkey Run and Dead Run Bridges, for safety purposes. |
| AD 1995 - 2009 | Altered | A number of the historic stone masonry walls are replaced with new stone-faced concrete core walls that differ substantially in height and appearance from the old walls. |
| | Altered | North of Pimmit Run, portions of the parkway median are paved with concrete and topped by a Cortan steel W-beam guardrail. |
| AD 1996 - 1997 | Altered | Due to public pressure and traffic accidents, the NPS installs W-beam guardrails in the median of GWMP - North, as a temporary measure in areas with a narrow median. |
| AD 1997 - 1998 | Altered | Jersey barriers, or concrete core access denial barriers, are installed at the Glebe Road, Gulf Branch, and Donaldson Run Bridges for safety purposes. |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

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| AD 1999 - 2002 | Rehabilitated | A rehabilitation of Windy Run Bridge includes the treatment of rust on the structural steel of the bridge, repairs to erosion at the piers, cleaning and sealing of the concrete abutments and wing walls, addition of safety extensions to the wing walls, and the repainting of the entire structure in new beige and brown colors. |
| | Rehabilitated | Rehabilitation of Donaldson Run Bridge includes the treatment of rust on the structural steel of the bridge and repairs to cracking pier filling and abutment breastwalls. |
| | Rehabilitated | New drains are installed in the deck of the Glebe Road Bridge during parkway rehabilitation. |
| | Rehabilitated | Some rehabilitation work takes place at Turkey Run Bridge, in conjunction with the rehabilitation of the rest of the parkway. |
| AD 1999 - 2004 | Rehabilitated | Rehabilitation of Gulf Run Bridge includes the replacement of the deck, repairs to cracks, and repainting. |
| AD 2002 | Rehabilitated | The Dead Run Bridge is rehabilitated as part of the broader parkway rehabilitation project. |
| AD 2002 - 2008 | Built | A Jersey barrier is added to the Windy Run Bridge for safety reasons. |
| AD 2003 - 2004 | Rehabilitated | A number of rehabilitation projects are undertaken along GWMP - North, including repairs to the footing erosion on the Pimmit Run Bridge and the painting and cleaning of the Glebe Road Bridge. |
| AD 2003 - 2008 | Rehabilitated | The Route 123 Overpass is rehabilitated. Among other things, the spalling and delamination of beams and pier caps is addressed. |

Physical History:

15,000 BC to 1876 AD

EARLY HISTORY AND SETTLEMENT

Prehistory and Native American Settlement

Humans are believed to have occupied the Chesapeake Bay region following the last glacial retreat at the end of the Pleistocene Age, or around 15,000 B.C. During this time, temperatures were cooler, the environment was more boreal, and sea levels were considerably lower. The Chesapeake Bay had yet to form in the Susquehanna River Valley. During this era, known as the Paleo-Indian Period and lasting from roughly 12,000 B.C. to 7,500 B.C., humans survived in small, mobile bands of hunter-gatherers and relocated often in order to follow large game such as elk, caribou, and deer. Gradually warming climates led to the rise of sea levels and the inundation of coastal environments, forcing the human populations living here to adapt. During the Archaic Period, which lasted from around 7,500 to 1,000 B.C., cultural change and the exploitation of resources underwent a dramatic increase. Humans developed more advanced technologies for hunting, fishing, and food preparation. The newly warm, wet climate encouraged the development of more riverine and estuarine environments, which in turn increased human use of aquatic resources. The size and permanency of human populations grew, along with an emphasis on local resource exploitation and social hierarchy. During the Woodland Period that followed, from approximately 1,000 B.C. to 1,600 A.D., humans continued to develop both culturally and technologically. Individual bands continued to become ever larger, and increasingly permanent. The making of ceramics and crop cultivation also became prevalent during this period. Diverse food sources were utilized and storage facilities created for long-term use and security. Warfare between these increasingly established tribes escalated, as well (Greenhorne & O'Mara 2008).

In the years before the arrival of white settlers, Native Americans of Eastern Algonquian linguistic stock known as the Conoy, or Kanawha, inhabited the District of Columbia area (Hodge 1906). Some of the earliest known Conoy to arrive on the inner coastal plain had settled along the Potomac River by the early fifteenth century. Evidence of these peoples is today found in archaeological assemblages of pottery and worked rhyolite, a volcanic rock similar to granite. In 1608, the Conoy groups who lived on the eastern shore of the Potomac River were known as the Nacotchtanks, Piscataways, Pamunkeys, Nanjemoy, Potapacos, and Yaocomacos. Among other things, they cultivated corn and crafted ceramics of a distinctive style known as Potomac Creek ware (Potter 1993: 11, 19, 125, 138, 145, 153, 187).

Although few specifics are known about these early Conoy Indians, by the early seventeenth century a village known as Nacotchtank stood just south of the future site of Washington, DC, on the southeastern side of the junction between the Anacostia and Potomac Rivers. This location was the seat of the Nacotchtank kingdom, which was probably comprised of around 400 to 500 people spread out between a cluster of riverside villages. Indeed, the word "Anacostia" originated in the early European corruption of the term, "Nacotchtank" (Part 2, Hodge 1906: 8). From their base in the central Nacotchtank village, inhabitants of the area

were ideally situated to take advantage of trade routes as well as the various resources found along the rivers, including fish, shellfish and water birds. The inner coastal plain of the Potomac River was widely recognized as a main fish spawning ground, attracting a wide range of species including herring, shad, salmon, and sturgeon (Gutheim and Lee 2006: 16). The importance of these resources to Native American life is made clear by the names of the nearby villages, marked on a 1612 map as: Namassingakent, meaning “plenty of fish;” Assaomeck, or “middle fishing place;” and Namoraughquend, or “fishing place” (Potter 1993: 153). The Nacotchtank living in this area thus depended heavily on the resources which the river provided: “The late winter and early spring fish runs provided them an ample and ready source of protein in the leanest months of the year, when agricultural surpluses and nut harvests stored from the year before were nearly depleted” (Potter 1993: 153).

European Contact

Captain John Smith’s voyages of exploration from Jamestown, Virginia initiated European contact with the Potomac River area. Initial relationships between local tribes and the newcomers were forged primarily on the basis of trade in furs, metal, and eventually guns. Indeed, the first description of firearms passing into the hands of Potomac River Algonquians dates to 1622, and concerns a band of Nacotchtank who that year attacked and killed all but one of a trading party led by Henry Spelman (Potter 1993: 209). This type of interaction became fairly typical, as throughout the early 17th century European settlements spread and relations with the indigenous population became increasingly tense. Skirmishes and even war ensued, but eventually subsided as European settlement continued to expand and Indian treaties and reservations were established. Either abandoned or taken by force from its indigenous inhabitants, the local landscape was soon being portioned out to European settlers.

In 1649, King Charles, II granted the land that is now northern Virginia to several of his supporters, who then sold the land to settlers to establish plantations and small villages. Thomas Fairfax was given approximately 5 million acres of land, property that was eventually sold to Thomas Lee by Fairfax’s daughter, Lady Catherine. The land in and around the proposed project area, comprising some 2,862 acres, was described as “the land of the Potomac between Great Falls and Little Falls.” Tobacco quickly became the staple crop in this area, and was cultivated on giant plantations and then shipped overseas. Slaves and indentured laborers frequently provided the labor necessary for this industry, establishing a strong pattern of continued settlement and land use (Greenhorne & O’Mara 2008).

A steady flow of Europeans continued to settle in the Chesapeake Bay area during the 18th century. The lands belonging to Thomas Lee were resurveyed, and were frequently farmed by tenant farmers or sold to other settlers. By 1760, tobacco had been replaced by wheat as the primary crop due to soil depletion and other factors, while experimentation with a variety of other crops was conducted by many tenant farmers. Wheat mills were soon being built throughout the area, in order to accommodate the rise in local wheat production (Greenhorne & O’Mara 2008).

Many Virginians of the time believed that the Potomac River provided the most direct access to

the interior waterways of the continent, thinking that the Potomac joined directly to the waters of the Ohio River Valley. This so-called “Potomac Fever” was shared by George Washington who, as early as 1762, began joining several organizations to improve navigation on the Potomac. Washington’s estate, Mount Vernon, overlooked the Potomac River and perhaps influenced his ongoing interest in the river. In 1785, the Mount Vernon Conference took place here in order to help resolve disputes over fishing, navigation, and trade in the Potomac River. Meanwhile, Washington chaired meetings of the Potowmack Company, whose mission was to enable vessels to navigate the upper reaches of the Potomac River. Eventually the company built several small canals that allowed rafts to travel downstream to Georgetown, but never achieved the ultimate goal of a bustling Georgetown-Cumberland waterway (Hulbert 1905). The Potowmack Company was bought by the Chesapeake and Ohio Company in 1824, and its resources were used to construct part of the Chesapeake & Ohio Canal.

Meanwhile, during the late 18th and early 19th centuries, transportation improvements increased throughout the area. New roads were built to connect towns and nearby states, while canal systems were established to connect the Lower Potomac with the Ohio Valley. Bridges crossing the Potomac River and other rivers and streams were erected, allowing for faster and more efficient travel throughout the region (Greenhorne & O’Mara 2008).

Both a contributing factor and a product of this growth was the increasing prosperity of towns and the new capital, which was founded in 1791. Washington, DC was formed from land given to the federal government by the States of Maryland and Virginia. At first, Virginia ceded a portion of Fairfax County as part of this agreement, to help create the District of Columbia. However, this parcel was later returned to Virginia in 1847 as Alexandria County. Subsequently, the City of Alexandria received recognition in 1852 and separated from Alexandria County in 1870. In 1920 all parts of this county that do not include the City of Alexandria became known as Arlington County, Virginia.

Industrial Growth and Civil War

As the nineteenth century progressed, agricultural activities in the Washington, DC area decreased in productivity and were gradually replaced by a growing industrial economy. This shift in turn prompted a rise in the local population, drawing many farmers and other civilians to the region in order to participate in the industrial boom. Population growth and prosperity in the District of Columbia area also brought improvements in transportation. The first bridge over the Potomac River opened at Little Falls in 1797, and connected Georgetown and Loudoun County, VA via the Georgetown & Leesburg Turnpike (High 2001). In 1810, after the first two bridges at this location were destroyed, a third was built using a type of chain suspension support that contributed to its name, Chain Bridge. Although this bridge and several others that replaced it were destroyed by floods, the name remained, and Chain Bridge went on to play an integral role in the Civil War history of the Washington, DC area. As a key crossing point to the city, during the war the Chain Bridge was heavily guarded by the Union Army in order to prevent attacks on the nation’s capital. It was also used on October 12, 1861 for the transport of the first Union Army Balloon Corps hot-air balloon across the Potomac River, an event which took place under cover of darkness and with men on the bridge holding lines to guide the

lofted balloon across (Robinson 1992: C3). Chain Bridge has been reconstructed a total of eight times, the most recent of which took place in 1939.

The diverse backgrounds of district inhabitants during the Civil War meant that residents of this area had a wide range of opinions on slavery and the use of slaves for labor. Throughout the war, the District of Columbia and vicinity became the literal crossroads for the two sides of this issue, since it sat along the river dividing Maryland, a Union state, from the heart of the Confederacy, or Virginia. Indeed, much of northern Virginia was used by Union and Confederate forces alike. Although no battles were fought here, both armies marched through the area and built temporary camps on private landowners' property. A number of forts were also constructed to protect the city, which by 1865 had become the most heavily fortified cities in the world. A total of 68 major enclosed forts and 93 batteries circled Washington, DC. Two of these forts were built along the Virginia side of the Potomac River near the present-day George Washington Memorial Parkway – North: Fort Marcy, to the north of the Chain Bridge, and Fort Ethan Allen to the south (National Park Service 2009).

Fort Marcy was built in 1861 and strategically placed near the Georgetown & Leesburg Turnpike and the Chain Bridge, on land that had previously belonged to local businessman Gilbert Vanderwerken. Constructed on a hillside, the ramparts and parapets of Fort Marcy were created using tons of earth piled anywhere from twelve to eighteen feet thick. Rifle pits and trenches were also dug around the fort, while much of the woods around its 2,208-foot perimeter were cleared in order to maintain high visibility toward the Chain Bridge and Georgetown & Leesburg Turnpike (National Park Service 2009).

Fort Ethan Allen was a smaller fort built around the same time on land owned by Mrs. E.M. Meredith and Stephen Meredith. It provided protection for the Chain Bridge and Georgetown & Leesburg Turnpike from the south side of the bridge (CEHP, Incorporated 2005). Neither Fort Marcy nor Fort Ethan Allen saw much action during the war, but both were often kept on “alert” status in case of a threat to the capital city. When the war ended in May of 1865, Fort Marcy was dismantled and the land returned to the Vanderwerken family, who continued to own it until after World War II (National Park Service 2009).

1876 AD to 1930 AD

PLANNING OF THE MOUNT VERNON MEMORIAL HIGHWAY

Envisioning a Parkway

In the decades following the Civil War, the rich agricultural resources of the Potomac River Valley fed the growth of the nation's capital, and the greater Washington, DC area prospered (Greenhorne & O'Mara 2008). In 1876, the United States celebrated the Centennial anniversary of its founding. The advance preparations and subsequent nation-wide festivities associated with this event triggered a wave of nationalism throughout the country, and sparked a new interest in America's historic and natural sites. In the greater Washington, DC region, early tourist destination sites included George Washington's home, Mount Vernon, and further north the natural wonder of the Great Falls of the Potomac. As two sites strongly associated

with George Washington, the conceptual link between the capital and Mount Vernon fueled the original desire to physically connect them through construction of the George Washington Memorial Parkway. As the project then matured in later years it was expanded to include Great Falls, another site with close ties to Washington.

Another concern which sparked interest in the parkway was preservation. Great Falls had been an area of interest since at least the end of the 18th century, when George Washington's efforts to build a canal around the falls attracted national and even international attention. In the end, Washington's dream did not come to fruition, but preserving the ruins of the Patowmack Canal became one of the primary reasons for extending the GWMP to Great Falls.

Another tribute to Washington's life that became popular during the late nineteenth century were annual trips to Mount Vernon. As early as 1888, a group of Alexandria residents obtained a Virginia charter to form the Mount Vernon Avenue Association (MVAA). The Association promoted travel to Mount Vernon and sought to receive public and private contributions for the construction of a road extending from a "point south of the Aqueduct Bridge... through the county and city of Alexandria, and through the county of Fairfax to the grounds... [of] Mount Vernon, over the most practicable route to be selected by the trustees of the Association..." (HAER VA-69 1994). The proposed boulevard promised to provide an improved road system to address the needs of tourists bound for Mount Vernon, in addition to boosting local commerce. The MVAA advocated a formal boulevard lined with elaborate exhibition buildings, statues of former presidents and vice presidents, and memorials honoring civil and military heroes from every state in the Union (HAER VA-69 1994).

Despite the enthusiasm of the MVAA, it wasn't until 1890 that the federal government began taking an interest in establishing a road to Mount Vernon. That year, the US Army Corps of Engineers (COE) surveyed and reported on three alternative routes for the proposed roadway, but did not initiate any further action. In 1901, the Report of the Senate Park Commission, also known as the McMillan Commission, recommended a series of improvements for the DC park system. Frederick Law Olmsted, Jr., a landscape architect on the Commission, secured support for both a Mount Vernon route and a "Potomac Drive" to Great Falls. More specifically, the Commission recommended "a continuous river drive" to preserve and provide access to the Potomac Palisades. It went on to assert that "the beauty of the scenery along the route of this proposed noble river- side improvement is so rare and in the minds of the Commission, of so great value, not only to all Washingtonians, but to all visitors, American and foreign, that it should be safeguarded in every way" (HAER VA-169 1994: 143). The Commission also recommended the creation of a national park at Great Falls.

Still, due in part to World War I, it was another few years before any real progress was made toward constructing the roadway. In 1922, the Bureau of Public Roads (BPR) made another "preliminary reconnaissance survey." Legislation was subsequently introduced to direct the Secretary of Agriculture, who was then responsible for the BPR, to lay out, construct, and maintain a Mount Vernon Avenue with an 80-foot minimum right-of-way outside of corporate limits. In December of that year, Congress created the United States Commission for the Celebration of the Two Hundredth Anniversary of the Birth of George Washington, and

construction on the Arlington Memorial Bridge began in 1926. Both events spurred the continuation of work on a corridor leading south to Mount Vernon. In response, BPR chief Thomas H. MacDonald reported the latest survey results, which supported two separate roads: a largely inland route extending 12.5 miles, and a 14.6 mile route along the Potomac River. In March, 1928, the Senate passed a construction authorization bill without significant opposition. After some debate in the House, the bill passed and was signed into law by Calvin Coolidge on May 23, 1928, at last opening the doors for construction on the Mount Vernon Memorial Highway.

When work began on the MVMH, the preservation of the natural Potomac palisades environment remained a leading concern, a fact illustrated by two events in 1926. First, the National Capital Parks and Planning Commission (NCP&PC) was created in order to provide for the “comprehensive, systematic, and continuous development of the parks, parkways, and playground systems of the National Capital and its environs.” This Commission was comprised of the Army’s Chief of Engineers, the Director of the Office of Public Buildings and Public Parks of the National Capital, the Director of the NPS, the Chief of the U.S. Forest Service, the Chairman of the Senate and House District committees, and four private appointees.

The second event of 1926 concerned a hydro-electrical proposal, supported by the COE, which would develop dams above and below Great Falls. These were the initial stages of a pattern that would continue throughout the twentieth century. In a process put in motion by pressures from population growth and expansion from nearby Washington and other counties, agricultural activities were gradually forced out of Arlington County and its environs. Government buildings and residential areas replaced farms, and soon the area was populated with commercial businesses.

In view of these changes, COE chief engineer Major General Jadwin called the parkway project a “prodigal” waste of resources that could be put to better use powering great industrial developments, lowering the cost of electricity in the Mid-Atlantic, and generating millions in tax revenues. Furthermore, he contended that the proposed dams would eliminate costly flooding problems all along the Potomac River, and provide an even better source of drinking water for the Washington metropolitan area. However, the newly-formed NCP&PC disputed the validity of these needs and opposed the project as incompatible with its own plans to preserve Great Falls as a natural park. The NPS, DOI, and the Commission of Fine Arts (CFA) all went on record in favor of preserving the falls in their natural state.

The Capper-Cramton Act

In May, 1928, Michigan Representative Louis C. Cramton, chairman of the House Subcommittee on Parks and Related Appropriations, secured passage of a bill forbidding the Federal Power Commission (FPC) from issuing permits for power developments in the vicinity of Great Falls until the NCP&PC and the power commission had a chance to consider the matter further. Cramton also introduced legislation to create a parkway along both sides of the Potomac, from Mt. Vernon to Great Falls, in cooperation with the State of Maryland and the Commonwealth of Virginia. Clearly, the bill was directed toward protecting Great Falls, the

palisades, and the Potomac River shoreline as a largely untouched nature reserve immune from intense development. The bill passed in the House, but unfortunately did not have time to go through Senate approval before the end of that year's session.

Not to be discouraged, Cramton introduced a similar bill in the next Congress. Again, this bill received some backing, but came up against opposition from the COE and hydropower interests. In response, a compromise of sorts was reached with the insertion of the so-called "Dempsey-Amendment," which stipulated that authorization of the parkway would in no way preclude future development of hydroelectric power or navigation in the vicinity of Great Falls. Nonetheless, the bill's supporters and the electric power company both recognized that it would be virtually impossible to gain permission to develop hydro-electric facilities once the parkway was authorized. The Senate passed the revised bill, put forth by Kansas Senator Arthur Capper, on May 13, 1930. The House approved the Senate's amendments on May 22, and President Hoover signed the Capper-Cramton Act into law on May 29, 1930. Although by this point construction of the Mount Vernon Memorial Highway was already underway, the new act cleared the way for the construction of a new and more expansive memorial parkway (Greenhorne & O'Mara 2008).

1930 AD to 1955 AD

THE PLANNING AND LAUNCH OF THE GEORGE WASHINGTON MEMORIAL PARKWAY

Building Mount Vernon Memorial Highway

During construction of the MVMH in 1930, Congress endorsed and expanded upon the McMillan Commission's Potomac Drive concept, authorizing an extended parkway to be known as the George Washington Memorial Parkway that would include the MVMH and extend on both sides of the Potomac River, from Great Falls to Mount Vernon and Fort Washington. Although it would be decades before the road itself was completed, this year marks its legislative and conceptual beginning. The Capper-Cramton Act authorized the appropriation of \$7.5 million for the new project, which would include:

"the shores of the Potomac, and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia side, except within the city of Alexandria, and from Fort Washington to a similar point above the Great Falls except within the District of Columbia, and including the protection and preservation of the natural scenery of the Gorge and the Great Falls of the Potomac, the preservation of the historic Patowmack Canal, and the acquisition of the Chesapeake and Ohio Canal below Point of Rocks." (Public Law 71-284 US Statutes at Large)

The necessary land for the project would be acquired by NCP&PC, before being transferred to the Office of Public Buildings and Public Parks for management. The states of Maryland and Virginia, as well as smaller political jurisdictions, were required to cover 50% of the land acquisition costs. Land could be acquired by purchase or donation to NCP&PC, and included the transfer of any federal properties to be included in the proposed parkway. In this way, the

pre-existing MVMH was incorporated into the larger GWMP project.

The term “parkway” was important during the 1930s, since it indicated recreation, rather than the movement of traffic. By the mid-1930s, the NPS and the DOI had codified the precise meaning of the term and developed a series of design criteria for federal parkway projects. According to the Recreational Resources Committee of the National Resources Committee, a parkway was defined as a “strip of public land devoted to recreation which features a pleasure vehicle road through its entire length, on which occupancy and commercial development are excluded, and over which abutting property has no right of light, air, or access.” NPS landscape architect Dudley Bayliss further emphasized the underlying principle of parkway development, or the idea that the road is only a part of the entire project. Thus, although the elongated configuration and central role of roadway development in National Parkways distinguished them from National Parks, the two shared ideals such as protection of natural resources, recreational development, improvement of wildlife habitat, and scenic beauty (HAER VA-69 1994: 153-4).

The MVMH was opened to traffic in 1932, just in time for the Bicentennial celebration of George Washington’s birth. The BPR immediately transferred the highway over to the jurisdiction of the Office of Public Buildings and Public Parks of the National Capital. When the OPBPP was abolished by executive order the following year, management of the MVMH became the responsibility of the National Park Service.

Planning the George Washington Memorial Parkway

Meanwhile, the NCP&PC began promoting the GWMP concept. At first, there had been little thought given to further road construction to the north of Arlington Memorial Bridge on the Virginia side of the river. Cramton and the NCP&PC had determined that road development along the Virginia Palisades was unnecessary and perhaps even undesirable. Once more, the ongoing conflict over natural resource management played a crucial role in driving concerns about the roadway. It was an absolute priority that the new parkway’s construction and placement not preclude future utilization of the Potomac’s hydro-electric resources or the development of an inland waterway, if or when Congress decided to approve such actions.

Soon after the opening of the MVMH, NCP&PC produced a brochure explaining the GWMP project to the general public, placing considerable emphasis on the parkway’s historic elements and symbolic significance. It began with the requisite account of the first president’s associations with Mt. Vernon, Washington DC, and the Patowmack Canal, then went on to explain: “The proposed park lands have been chosen primarily to combine preservation of the outstanding scenic and historic features with appropriate access to these areas...” (HAER VA-69 1994: 148).

Other publications promoting the GWMP included an article written by Mount Vernon Superintendent Clarence Phelps Dodge for the February 1932 issue of *American Forests*. Therein, Dodge proclaimed: “This year of 1932, in which the Bicentennial of George Washington is celebrated, is a most fitting time to spread throughout the land the knowledge of

the Potomac, a river identified with the life of the first President and so influential in aiding and shaping his character.” He went on to describe the scenic, historic, scientific, and recreational attributes of the proposed parkway, listing Washington’s many associations with Alexandria and his connections to Mount Vernon, Washington, and Great Falls. Finally, Dodge emphasized the fact that the proposed GWMP was “the nation’s parkway” and “a monument to the first president, visioned and created in his honor” (HAER VA-69 1994: 148).

Charles W. Eliot II, NCP&PC Director, provided more specific development details in an article he wrote for *Landscape Architecture* in June of 1932. Much to its benefit, this article was published alongside Gilmore Clarke’s account of the design and development of the MVMH. In praising the proposed parkway, Eliot noted “the hopes which are entertained for the whole future project including both banks of the Potomac River from Mount Vernon to Great Falls.” He went on to assert that the roadway was intended to “preserve and make available the remarkable inspirational values along some twenty-eight miles of the Potomac River Valley,” adding that the proposed parkway encompassed a unique array of scenic views, scientific areas, and recreational opportunities. He further discussed the historical significance of the site, stating that “no area in the United States combines so many historical monuments in so small a district as the Potomac River Valley in the Washington Region” (HAER VA-69 1994: 149).

Eliot envisioned a parkway drive along the Maryland shore, paralleling the MVMH with occasional lengthy fills and bridges constructed in a similar fashion along the road. He maintained that the parkway on the Virginia shore would serve primarily as a nature preserve, with little or no road development necessary in the foreseeable future. Here traffic would use existing roads located far back from the edge of the palisades, since the rugged terrain and deeply-cut stream valleys would make road construction costly and “very destructive of natural beauty.” He also urged that the shoreline and palisades be reserved for pedestrians, horseback riders, and boaters. In the meantime, access to picnic areas and overlooks might be provided in the form of dead-end park roads leading to selected viewpoints (HAER VA-69 1994: 150).

Meanwhile, parkway supporters continued to emphasize the project’s historic and commemorative value throughout the 1930s, especially in their appeals for public support. In 1935, NPS Director Arno B. Cammerer declared that the parkway was “perhaps the greatest memorial yet proposed to honor our First President. He further stated that the George Washington Memorial Parkway would provide a 50-mile circuit of the choicest scenery in greater Washington, every foot of it hallowed by memories of the Father of His Country.” In short, Cammerer cast this project as one of lasting and national importance (HAER VA-69 1994: 150).

In 1931, Congress approved a one-million dollar outlay for the NCP&PC, \$237,700 of which was allocated to the development of the GWMP. The primary goal for these funds was to expand the roadway over a period of six years, primarily through land acquisitions. By 1936, the NPS had obtained the Leiter Estate, or some 167 acres of river-front property, a portion of which was developed into a picnic area by the Civilian Conservation Corps (CCC). Still, despite the emphasis on land acquisition, progress on the parkway remained slow. In large part

due to the pressures of the Great Depression, the matching funds which state and local governments were obligated to contribute to the project quickly became a serious issue (HAER VA-69 1994: 151).

Designing the George Washington Memorial Parkway

Notwithstanding these financial concerns, during the 1930s the parkway gradually extended north along the river, reaching the newly-constructed Arlington Memorial Bridge, Virginia Route 50 and the Francis Scott Key Bridge as it went. A particularly crucial GWMP development beyond the 1932 MVMH portion took place between Arlington Memorial Bridge and Rosslyn, Virginia. The major design concerns of this initial section involved the question of how to fit a four-lane parkway along the relatively narrow shelf of land alongside the existing Little River channel, and then fit it under the Francis Scott Key Bridge. This issue was ultimately solved by making some small alterations to the natural landscape. After overcoming initial objections from the COE, the BPR was granted permission to fill in enough of the Little River channel to provide room for the parkway. In order to fit the roadway into the sloping terrain with minimal disruption of the existing contours, the BPR separated the north and south-bound lanes for a short stretch alongside Theodore Roosevelt Island, installing a relatively narrow median that placed the southbound lanes slightly higher up on the hillside. This minimized the need for excessive cuts or fills, and allowed parkway builders to preserve a line of attractive trees protected by rustic stone tree wells on the steeper sections of the road. Meanwhile, both Maryland and Virginia roadways were equipped with rustic log guardrails along their river side.

While the GWMP's road and landscape details were primarily completed by BPR engineers and NPS landscape architects, other notable consultants contributed to the parkway's general development. Frederick Law Olmsted, Jr. served as a member of the NCP&PC, and Gilmore Clarke as the landscape architecture expert on the CFA. Olmsted's involvement was largely limited to matters of initial boundary considerations and the basic location and alignment of the roadway. According to future NPS Director Conrad Wirth, Olmsted's primary concern was that "parkway roads would take advantage of the vistas with the least possible damage to the rim of the Potomac River Gorge and that it would provide necessary parking places with the least amount of damage to scenic values." Clarke suggested that the proposed four-lane road along the Virginia side be divided into two halves, a northbound drive running along the base of the palisades, and a southbound one located near the top of the cliffs. He argued that two widely-spaced, two-lane drives could be integrated into the existing terrain more sensitively and would result in much less visual and environmental damage than a single four-lane roadway, which would require a broad terrace of at least 60 feet in width. The one drawback to this approach, it seemed, was that an upper drive would entail the construction of several fairly substantial bridges to traverse the deep ravines cut into the palisades by streams feeding into the Potomac River. However, Clarke claimed that these bridges would not be overly expensive because they only needed to accommodate a single two-lane roadway (HAER VA-69 1994: 154).

With the entrance of the United States into World War II in 1941, the NCP&PC tried to push the GWMP project as a war-time emergency initiative. Their effort was unsuccessful,

however, and progress on the project ground to a halt.

Extending the George Washington Memorial Parkway to Spout Run Parkway

After World War II came to a close, the world gradually began the process of returning to normal, and work resumed on the GWMP. In 1947, the NCP&PC completed land acquisition from the Francis Scott Key Bridge to Spout Run, and from the Spout Run Parkway branch inland to Lorcom Lane. A grading contract was awarded to Nello L. Teer Company of North Carolina. When all of the available paving contracts were deemed too high, a smaller paving job was awarded to W. H. Scott of Franklin, Virginia, and the remaining work was completed by the BPR day-labor forces in May of 1950.

The Spout Run Parkway and two associated bridge structures were constructed during this period, in the late 1940s. These sections completed what was then the northern terminus of the GWMP, and included the Spout Run Parkway Culvert (HAER VA-88 1994), a reinforced concrete rigid frame filled spandrel arch culvert with ashlar stone facing constructed in 1947; and the Spout Run Bridge Westbound (HAER VA-86 1994), a reinforced concrete rigid frame arch bridge that carried westbound lanes of Spout Run Parkway and acted as the northern terminus of the GWMP between its completion in 1949 and the eventual parkway extension to Langley, Virginia in 1959.

Opened in 1950, the new section of roadway to Spout Run was immediately popular with commuters. Other highway designers were impressed with the way parkway architects had managed to construct a modern, relatively high-speed roadway along the steep bluffs of the Potomac River. As planned, the parkway south of the Spout Run intersection was divided into two halves: the northbound lanes following a slight bench along the Potomac shoreline, while the southbound lanes occupied a much higher position for most of the route before dropping down to river level just north of the Francis Scott Key Bridge. Several highway design textbooks published during the 1950s and 1960s used views of the new northern section of the parkway to illustrate modern road-building techniques. Landscape architect Lawrence Halprin also used the “classic” view of the roadway from Francis Scott Key Bridge to illustrate his 1966 book *Freeways*, in which he praised the parkway as a superb example of the marriage between road and landscape (HAER VA-69 1994: 156).

However, not everyone was pleased with the GWMP. Both the National Parks Association and the Wilderness Society protested that no matter how artistically the engineers and landscape architects designed and constructed the roadway, it would still be an unacceptable imposition on the scenic beauty and natural resources that the GWMP was authorized to protect (HAER VA-69 1994: 157). In April of 1950, the National Parks Association wrote to the NPS Director, Newton B. Drury, advising that further parkway construction on either side of the river should be discontinued. Drury defended the plans and stated that the GWMP was “in effect a metropolitan or city park development as contrasted to the great wilderness and primeval areas encompassed in some of the national parks.” The advancing parkway would “permit the viewing of the river scenery by millions of people who would otherwise miss these inspiring sights and sounds.” Moreover, he argued that there would also be “ample provision

for nature lovers and the relatively small numbers of people who prefer secluded trails and waterways” (Mackintosh 1996).

In addition to such challenges from potential supporters, project funding had become a serious and, at times, crippling concern. Little development had taken place on the Virginia side before 1948, when the NCP&PC received \$200,000 in appropriations for the GWMP and both the Virginia Assembly and Arlington County agreed to contribute. However, immediately following the completion of the Spout Run Parkway segment in 1950, progress on both the Virginia and Maryland portions of the GWMP stalled due to the unwillingness of federal, state, and local governments to provide fiscal support for the project. Despite repeated requests, Congress refused to appropriate additional funds for the GWMP between 1949-1954, and the pursuit of further support was slow (HAER VA-69 1994: 158). Between 1950 and 1952, federal, state, and local contributions totaled approximately \$600,000, to be spent specifically on parkway development in Arlington County.



Figure 4. The north section of the GWMP in 1959. The Francis Scott Key Bridge is in the background (MRCE, “George Washington Memorial Parkway”).

1955 AD to 1963 AD

CONSTRUCTION OF GEORGE WASHINGTON MEMORIAL PARKWAY - NORTH

Building GWMP – North

Throughout the late 1950s, an internal NPS stimulus to project development was provided by the Mission 66 program, a nationwide effort to upgrade NPS facilities in time for the 50th anniversary of the NPS in 1966 (HAER VA-69 1994: 171). More specifically, however, the

year 1955 marks a turning point in the development of the GWMP. It began with the successful request of the NCPC (formerly known as the NCP&PC) for \$135,000 in Fiscal Year 1955, to include the necessary funds to purchase the land between Route 123 and the Leiter tract. Of still greater importance, the Military Construction Authorization Act was passed that year, giving the Director of the Central Intelligence Agency (CIA) the ability to acquire lands, construct facilities, and build access roads for the new CIA Headquarters facility that had recently been proposed. The location chosen for this new installation by the CIA was a property formerly owned by the BPR in Langley, Virginia. With the development of the CIA Headquarters facility, 8.5 million dollars were transferred to the NCPC and the DOI in order to provide for the extension of the GWMP to Langley. This new development, though absolutely pivotal in the parkway's completion, also required planners to shift their views on its construction. It immediately became clear that the new roadway was going to be not only a recreation area, but a commuter route, prompting the design studies to focus on broader transportation networks.

Meanwhile, the new allocation of funds allowed an acceleration of work on the GWMP that had not been seen for almost a decade. The contract for grading, drainage, and bridge abutments was awarded to Taylor and Keebler, Incorporated of Clifton, Maryland, and in 1956 construction began on the 2.37-mile section between Spout Run Parkway and the Chain Bridge. Grading and preliminary construction on the parkway continued through 1957 and 1958. The paving contract for the segment between Spout Run and the CIA Interchange was let in two parts to Newton Asphalt Company of Alexandria, Virginia and Contee Sand and Gravel of Laurel, Maryland, for a combined total of \$1,580,462. The dual four-lane parkway drives along this section continued to be separated by an uninterrupted median of varying width, while the north and southbound lanes pursued independent alignments that often included slight variations in elevation to adjust to the existing terrain. However, Gilmore Clarke's proposal to place the northbound lanes immediately along the Potomac River was discarded due to engineering and environmental considerations. The negative effects on the Potomac Palisades, BPR decided, would be even greater if the road were to be routed along the Potomac shoreline. Furthermore, the expense and technical difficulty of constructing two widely-separated roadways with integrated circulation features made the prospect particularly unattractive to BPR's engineers. By bringing the independent roadways together to cross streams and ravines on a single bridge, or two closely-spaced bridges, the project was able to save considerably on excavation, construction, and engineering costs (HAER VA-69 1994: 159).

With the necessary funding in place, BPR's design decisions soon began taking shape in the landscape. The Spout Run Parkway was realigned, and two new GWMP bridges were built. The Spout Run Lower Level Bridge is an enlarged, reinforced concrete box culvert constructed from 1957 to 1958 using rusticated stone masonry facing to match the style of earlier GWMP bridges (HAER VA-80 1994). The Spout Run Arch Bridge was built from 1958 to 1959 as a reinforced concrete rib-arch bridge, which has been called one of the most dramatic constructions on the GWMP (HAER VA-79 1994). This bridge was also the first to break tradition with the rustic aesthetic used in previous GWMP bridges.

The bridges over Pimmit Run, Donaldson Run, Windy Run, Glebe Road, and the Gulf Branch were all constructed between 1957 and 1959, in association with the extension of the GWMP to Langley. The CIA Entrance Overpass was constructed in 1959 as a pre-stressed concrete girder bridge resting on concrete piers and abutments that allowed the GWMP to pass underneath. The Route 123 overpass constructed from 1957 to 1959 was designed to carry connecting roads over the GWMP in northern Virginia, and required the demolition of buildings and the relocation of various utility lines.

Completion of the GWMP – North

In 1959, President Eisenhower participated in the ceremony to lay the cornerstone of the CIA building, and also attended the Ribbon Cutting Ceremony for the opening of the GWMP extension between Spout Run Parkway and the CIA to traffic (Figure 4). Still, no one considered the CIA headquarters to be a suitable terminus for the Virginia section of the GWMP. NPS officials wanted the parkway to extend north toward Great Falls, while CIA and regional transportation planners were in favor of its direct connection to the Capital Beltway or Interstate 495. There was also debate between the BPR and the NPS regarding how and where the roadway should be placed, in this final section. The NPS wanted it to maintain a considerable distance from the actual palisades escarpment, in order to preserve natural resources and reserve space for the development of picnic areas and trails. Moving the roadway back from the palisades would also reduce construction costs substantially by eliminating several bridges. The BPR had no specific objection to this proposal, but it was noted that the alignment preferred by the NPS would cut into the BPR property. In May of 1959, the BPR agreed to transfer a 72.7-acre tract to the GWMP, provided the NPS approve the construction of an interchange in the Turkey Run area that would facilitate access to the BPR research facility. Upon this compromise, Congress appropriated an additional \$62,000 for further land acquisition in this area.

The last expenditure of Capper-Cramton funds on the Virginia portion of the GWMP, this allocation also provided for construction of the remaining bridges over Turkey Run and Dead Run. Both bridges were constructed under the same contract, and share a design that reflects the aesthetics of the late 1950s, characterized by light, clean lines and silhouettes. This style is the antithesis of the design philosophy used by MVMH landscape architect Gilmore Clarke, who believed that the more rugged the scenery, the more rustic the bridge should be. Nonetheless, the new bridges respected the overall design ideals of the GWMP and its scenic values. Modern engineering, combined with the design philosophy of the “parkways” as scenic, dictated a continuously-curving road, rather than a series of curves connected by straight sections. The horizontal curvature and sloping deck of the Dead Run Bridge allowed for this continuous curvature, in addition to providing the least visual intrusion to the surrounding landscape (HAER VA-69 1994). Also, many of the bridges were installed with stone-faced concrete walls for the road’s approach to the bridge. These designs, though new and different, thus offered the NPS the desired effect: a safe, innovative parkway compatible with its predecessor, the MVMH, which was deemed the most modern roadway of its time.

Meanwhile, designs for the vegetation along the parkway corridor were underway. Planting

plans drawn up by the National Park Service in 1959 and 1962 illustrate a careful layout of shade, understory and evergreen trees as well as shrubs that were intended to complement the shoulders and median of the roadway as it traveled along the heights above the river (DSC TIC 850/80650 and 850/80727). Although it includes a few non-native trees and shrubs, the great majority of the plant list is comprised of native vegetation meant to blend, to some extent, with the pre-existing woodland along the parkway corridor. On the other hand, the abundant use of certain, more showy understory trees such as flowering dogwood (*Cornus florida*), eastern redbud (*Cercis canadensis*), shadblow serviceberry (*Amelanchier canadensis*), Washington hawthorn (*Crataegus phaenopyrum*), and white fringe tree (*Chionanthus virginicus*) served to decorate the natural surroundings with an unusual variety of colors. A relatively high concentration of red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), northern red oak (*Quercus borealis*), and scarlet oak (*Quercus coccinea*), all of which exhibit bright autumn colors, further emphasized this effect.

In the end, the mix of the modern bridges and roadway set against the dramatic natural and designed views of the Potomac River Gorge, Palisades, the thick woodlands along the river and the adjacent forest of Turkey Run Park, illustrates careful planning and a commitment to the goal of lying lightly on the land. The preservation of views to the Potomac River Gorge, and protecting the area's natural resources, were clearly one of the parkway's greatest and most successful priorities.

The north section of the GWMP was opened to traffic from the recently completed Capital Beltway in December of 1962, although the Dead Run Bridge was apparently not entirely completed until early 1963 (Figure 5). The opening of this section of parkway coincided with that of the Capital Beltway segment connecting Virginia Route 7, or Leesburg Pike, to Maryland Route 190, or River Road. Extending some 7.5 miles along the Potomac River, the now completed GWMP – North wove and twisted its way north, through the fairly dense, hilly wooded areas preserved at its expense. Vegetation ranging from preserved sections of old-age, diverse hardwood forest to more recent plantings of dogwood (*Cornus florida*), eastern red bud (*Cercis canadensis*), white pine (*Pinus strobus*), crab apple (*malus* sp.), red maple (*Acer rubrum*), and a variety of oaks briefly broke here and there to provide breathtaking vistas of the river and the iconic city beyond. An added attraction to the northern section of the parkway was offered by the adjacent Turkey Run Park, whose development began in 1961. Plans for the new park called for a short spur road and four parking and picnicking areas, a promise to provide the intended recreational value of the parkway even as its final stages linked it to one of the region's primary commuter highways.



Figure 5. View of the CIA Interchange in 1962, looking northbound. Note the lack of vegetation within the median and interchange. Photograph by Abbie Rowe. (MRCE, "George Washington Memorial Parkway," DOI 7184-1L).

1963 AD to 2009 AD

MANAGEMENT OF THE GEORGE WASHINGTON MEMORIAL PARKWAY

Opposition and the End of Parkway Development

Now that the GWMP had reached the Capital Beltway, with modern bridges and scenic views along the way, perceptions of the parkway's true function underwent an important shift. By the 1960s, most families had at least one car, and in some cases two. The number of people driving, coupled with the GWMP's easy access to the core of Washington, DC and the pure enjoyment of driving along it, meant that it became a natural commuter route. This change was illustrated by a request from a U.S. Representative from Virginia named Joel Broyhill, who asked that the speed limit of the GWMP be increased from 40 to 50 mph. In his response to Broyhill, DOI Solicitor George W. Abbott stated that the road was a park road intended for resource preservation and recreation; but Broyhill continued to stress its function as a commuter route.

Meanwhile, the NPS still wished to realize the original vision of the GWMP continuing to Great Falls (Figure 6). Opposition to this extension brought out specific local concerns and the

growing feeling that parkways were not capable of balancing transportation needs with recreation and resource protection. After a Senate Appropriations Committee meeting in which local citizens accused the NPS of having “defiled and desecrated the palisades” in constructing the Spout Run and Arlington County portions of the GWMP, Congress asked the NPS and the NCPC to re-examine the original plan of extending the parkway to Great Falls (HAER VA-69 1994: 161).

Compounding concerns about the original plans for the parkway was the waning support of the general public. Several conservation and outdoor organizations vocally opposed the continuation of the GWMP to Great Falls. The District of Columbia chapter of the Audubon Society strongly contested the development plan, counseling that “the terrible destruction which has accompanied the building of the Memorial Parkway on the Virginia side below Chain Bridge can never be repaired and is a convincing demonstration that the building of a parkway is not consistent with the preservation of the scenery of the gorge.” The Wilderness Society stated that the proposed development in Fairfax County “would forevermore destroy the quality of remoteness which can still be found here.” The National Wildlife Federation, the Citizens Committee on National Resources, and the Great Falls Garden Club also urged parkway developers to reconsider their plans (HAER VA-69 1994: 162).

In view of such strong contention, it became increasingly difficult for the NPS to justify its intentions for the parkway, both fiscally and materially. By 1966, the combined federal, state, and local expenditure on the GWMP was \$33,980,271, including \$8-million given by the CIA. It was further noted that the newer sections of the GWMP, much like the Suitland Parkway and the Baltimore-Washington Parkway, had more in common with modern express highways than national parkways such as the Blue Ridge Parkway and the Natchez Trace, and therefore should be funded by ordinary highway development (HAER VA-69 1994: 165).

Maintaining GWMP – North

By the 1970s, the management strategy for the GWMP had firmly shifted from further development and construction to roadway maintenance. For the most part, changes to the north section focused on bridge repairs and guardrails during this period. Following a fatal crash in December, 1970, a Washington Post article discussed the need to investigate the safety of the bridge rails, which were made of aluminum. The newspaper quoted NPS staff asserting that a request for money to strengthen the parkway railings would be submitted in January, part of a five-year capital improvement project set to begin in 1973. However, according to HAER bridge records from 1994, the aluminum rails were subsequently replaced with steel rails in 1972 and 1973.

Some of the first plans to rediscover the parkway’s original recreational use emerged in 1974, when a feasibility study was conducted for what would become the Potomac Heritage National Scenic Trail. The goal was to establish a non-motorized travel route linking five physiographic provinces, from the mouth of the Potomac River all the way to the Allegheny Highlands (NPS 2008a: 1). As the parkway’s functional use continued to grow, this initiative provided a measure of balance to the landscape, by recognizing and expanding upon its recreational value.

Meanwhile, when it eventually became clear that there was no chance of completing the parkway along the Virginia shore, the NPS returned a 14.7-acre tract to private ownership in 1987, in exchange for a development restriction on 20 acres of prime river-front property (HAER VA-69 1994: 166). Although the period of parkway expansion had clearly ended, its popularity continued to rise, and the issue of safety on the historic roadway became increasingly prominent.

A series of highly publicized highway accidents in the 1990s again focused attention on the managerial dilemma of how to balance the varying and disparate concerns of historic preservation, natural resource protection, and safe, efficient traffic control. For example, addressing safety-related federal agency compliance responsibilities under Section 106 of the National Historic Preservation Act for a portion of the GWMP from Theodore Roosevelt Bridge to Spout Run Parkway highlighted the significance of Parkway features, including the use of stone walls. In response, in 1992 a Programmatic Agreement (PA) was developed to guide safety improvements along the Parkway and attempt to retain historic parkway characteristics. This included the installation of modern roadside safety barriers built in the form of stone walls so as to perpetuate this aspect of parkway architecture.

Yet virtually every major accident on the GWMP produced the same criticism, namely that the parkway was in dire need of expressway-standard safety features, regardless of their impact on its visual appearance or historic integrity (HAER VA-69 1994: 189). One particularly dramatic, fatal crash in 1996 set off a chain of protests that forced the NPS to alter its long-standing opposition to the construction of visually intrusive safety measures. The accident occurred at a point where the varying-width median narrows to cross one of the parkway bridges. The median was only six to eight feet wide at the accident site, and there was no guardwall separating opposing traffic lanes. According to the American Association of State Highway and Transportation Officials (AASHTO) guidelines, crash-proof safety barriers should be placed on medians that are less than thirty feet wide (HAER VA-69 1994: 190).

Pressure from the Virginia congressional delegation, combined with adverse publicity caused by another fatal crash, forced parkway officials to erect safety barriers to separate on-coming traffic lanes along substantial stretches of the GWMP from the Washington National Airport north to the Capital Beltway. The plan called for the NPS to construct 27-inch high barriers wherever the median narrows to less than 15 feet wide. In order to accommodate the demands made by the adopted schedule, the NPS was forced to install the conventional W-beam guardrail. Cor-ten® steel, which naturally rusts, was used to achieve a better visual effect than galvanized steel usually used in rails of this kind.

Meanwhile, the northern section of the GWMP was listed in the National Register of Historic Places as part of a thematic, multi-property nomination for the parkways of Washington, DC in 1995. This nomination discusses all of the major parkways in the Washington, DC area, including the rest of the GWMP, Rock Creek Parkway, Suitland Parkway, and the Baltimore-Washington Parkway. It also examines the history of the parkway movement, how it relates to the City Beautiful Movement, and how the NPS viewed the role of parkways as cars

and roads developed into necessities, rather than objects of recreation. Different types of parkways are addressed, and comparisons are drawn between similar characteristics of each one. Finally, the nomination recognizes the major parkways of the National Capital Region as an illustration of coordinated regional planning and exemplary landscape design. In particular, the GWMP is cited as significant for its historic association with George Washington, and its function as a commemorative tribute to both Washington and Clara Barton.

Thus, the primary issue for the parkway continues to be how the National Park Service can integrate these commemorative and historic values with its use as a high-volume, sometimes dangerous, commuter route. In 2005, the NPS began studies in conjunction with the Eastern Federal Lands Highway Division of the FHWA, to incorporate safety improvements into the north section of the GWMP. During the planning process the NPS, along with the Virginia State Historic Preservation Office, the Advisory Council on Historic Preservation, and other Programmatic Agreement (PA) signatories, reached an understanding that portions of the 1993 PA and its subsequent Temporary Amendment of 1997 had expired, and that this document was therefore outdated. The content of these documents was moreover judged insufficient to address more recent concerns with the proposed safety improvements as they effect parkway characteristics and landscape, including the existing historic stone walls and viewsheds. A new, revised PA is still in the process of being developed with the original signatories and other consulting parties in order to guide roadway rehabilitation and generate measures for the mitigation of common issues.

The proposed safety improvements for the parkway include the replacement of the character-defining stone walls, which do not meet the current roadway safety guidelines of AASHTO. An Environmental Assessment (EA) prepared in March, 2008 discusses the project, its various alternatives, and the potential impacts it could have on the environment, including cultural resources. As part of the EA preparation and in an effort to understand the impact that changing the stone barrier wall height might have, a video was made that documents the walls and their views to the Potomac River Gorge. Using a technique called match-making, the video simulates the driving and passenger experience as if the walls were reconstructed at the suggested 27-inch height, in a split-screen view that allows the user to compare the current view with the proposed one. This CLI is another important component of the mitigation effort behind both the EA and the new PA.



Figure 6. Secretary of the Interior Stewart Udall, leading a press trip along the parkway, March 3, 1965. Photograph by Abbie Rowe. (MRCE, "George Washington Memorial Parkway," DOI 9065-0).

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

INTRODUCTION

This section provides an evaluation of the physical integrity of the cultural landscape along the north section of the George Washington Memorial Parkway, by comparing the existing conditions with those landscape characteristics and features present during the historic period of significance, from 1930 to 1963. Landscape characteristics are the tangible and intangible aspects of a cultural landscape which express its historic character and integrity, and which allow visitors to understand the history of a site. Each characteristic or feature is classified as either a contributing or a non-contributing element of the site's overall historic significance.

Landscape characteristics are classified as contributing if they were present during the property's period of significance, and non-contributing if they were not present during that period. Non-contributing features may in some cases be considered "compatible," if they are determined to fit within the physical context of the historic period and match the character of contributing elements in a way that is sensitive to the construction techniques, organizational methods, or design strategies of the historic period. Features designated as "incompatible" are those that are not harmonious with the quality of the cultural landscape, and whose existence can lessen the historic character of the property.

This section also includes an evaluation of the property's integrity in accordance with National Register criteria. As defined by the National Register, historic integrity is the authenticity of a property's identity, evidenced by the survival of physical characteristics that existed during the site's historic period. The National Register recognizes seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Several or all of these aspects must be present for a site to retain historic integrity. To be listed on the National Register, a property must not only be shown to have significance under one of the four criteria, but also should be demonstrated to retain integrity to the period of significance.

HISTORIC SIGNIFICANCE

Landscape Characteristics and Features

Contributing landscape characteristics identified for the GWMP – North are natural systems and features, spatial organization, land use, topography, vegetation, circulation, buildings and structures, views and vistas, small-scale features, and archaeological sites.

The natural systems and features of the north section of the GWMP have undergone few alterations over time. The parkway was designed to lie lightly on the land, with the utmost care given to the preservation of such features as the Potomac Palisades, the Potomac River Gorge, and the various runs and ravines that drain into the Potomac River. The realization of these goals is evident throughout the length of the corridor, in the separate northbound and southbound alignments, and the protection of

George Washington Memorial Parkway - North

George Washington Memorial Parkway

significant forested lands including Turkey Run Park. The park's continued efforts to protect the surrounding landscape has thus allowed the natural systems and features of this property to retain a high level of integrity to the historic period of significance.

The spatial organization of this cultural landscape has similarly remained relatively unchanged since the parkway's initial design. The north section of the GWMP has a curvilinear alignment designed to take advantage of existing topography and minimize damage to the landscape. The unaltered layout of the road, the historic stone masonry guardwalls in the rustic style, the historic bridges, scenic overlooks, variable median widths, and separate northbound and southbound corridors still illustrate the original design principles used in the parkway's construction. As a result, the spatial organization of the parkway corridor retains a high level of integrity.

Despite the rapid changes that have taken place in the surrounding metropolitan area, land use along the north section of the George Washington Memorial Parkway has changed little since the historic period of significance. The roadway still retains its utility as both a recreational and a functional parkway extending from Spout Run Parkway to Interstate 495. Since reaching the Capital Beltway in December of 1962, it has become increasingly busy due to rising commuter use. However, the parkway is still actively visited by tourists and others who are more interested in its scenic and recreational value. Thus, although its two functions sometimes clash, land use at GWMP – North still retains a high level of historic integrity.

Topography along the north section of the GWMP has been only minimally altered since the roadway's initial development. This portion of the roadway lies primarily in the Upland Piedmont physiographic province, with a transition to the Coastal Plain physiographic province near Spout Run. It features the dramatic cliffs of Potomac Palisades, but also a series of gently sloping hills, curves and level areas that follow the contours of the land north of Chain Bridge Road. From Chain Bridge Road south to the Spout Run Parkway, the palisades have a nearly one to one slope whose steep topography required the installation of retaining walls to support the parkway in some spots. In other areas, the southbound lanes cut into the hillside at a higher elevation than the northbound ones, a measure taken to minimize the amount of incising and filling needed during the roadway's construction. The separation of the parkway's two halves with a grade also allows the southbound lanes to view the Potomac River Gorge, Georgetown, and Washington, DC over the northbound lanes. With each curve or dip in the road, the traveler is drawn forward to the next breathtaking vantage point, just as early motorists were during the parkway's first decades of use. The natural, rolling topography therefore remains largely unchanged since the historic period of significance, and retains a high level of integrity.

Due largely to the existing geographical constraints, circulation patterns along the north section of the GWMP have remained relatively constant since its construction. For the most part, its layout follows a linear main corridor that runs from the intersection with the Spout Run Parkway to the Capital Beltway. Interchanges occur at Route 123, the CIA Overpass, and the Capital Beltway (I-495), while a link to regional roads is provided by the Spout Run Parkway. Two NPS parks are accessible from this section of the GWMP: Fort Marcy from the northbound lane, and Turkey Run Park from both northbound and southbound lanes. In addition, the northbound lanes feature two overlooks: the South

George Washington Memorial Parkway - North

George Washington Memorial Parkway

Donaldson Scenic Overlook and the North Donaldson Scenic Overlook, both of which offer the same views of the Potomac River Gorge, Georgetown, and Washington, DC that would have existed during the early years of parkway use. The only other opportunities to pull off the road are provided by an access point or exit from both north- and southbound lanes to the US Park Police D-2 Substation and Parkway Headquarters within Turkey Run Park, and an emergency vehicle cross-over located between the north- and southbound lanes just south of the Capital Beltway. As the majority of these patterns of access and circulation were installed with the original parkway during the historic period of significance, they retain a high level of integrity.

The vegetation of today's GWMP – North includes both native and ornamental species, many of which were planted during the historic period of significance. For example, trees identified in the Route 123 Interchange were found to match 75 to 85 percent of the original planting plans for that section of the parkway, according to both species and location. Certain flowering trees historically selected to provide color to the landscape and blend naturally with the foreground of adjacent wooded areas still exist, including dogwoods and redbuds. Curvilinear areas of lawn with varying widths continue to serve the same purpose they did in the original parkway design, helping to break up the more geometrical, straight sections of the parkway. For the most part, existing masses of vegetation along the length of the roadway are still in their historic locations, though they have increased in size and have gradually grown closer to the parkway in their search for open, sunlit areas. This effect has resulted in the narrowing of drivers' visual corridor, in some areas, and the blocking of carefully designed views, in others. However, it does not represent a permanent change to the landscape. Vegetation along GWMP – North has therefore undergone some minor changes over the years, but retains a moderate to high level of integrity to the historic period of significance.

Most of the buildings and structures extant along the north section of the GWMP have remained unaltered since their construction during the historic period of significance. These include over sixty historic stone masonry guardwalls, two overpasses, and seven bridges whose character continues to frame the parkway experience with a weathered influence more than half a century old. However, since 1963 several additional structures have been added to this landscape, largely due to safety concerns but also related to the increased levels of parkway use. These include the US Park Police D-2 Substation, two Parkway Headquarters buildings in Turkey Run Park, the steel-backed timber guardrails in Turkey Run Park, intermittent W-Beam guardrails, several stone walls, and the Jersey barriers associated with certain bridges. Due to these non-contributing additions to the landscape, the buildings and structures of this cultural landscape retain a moderate level of historic integrity.

The views and vistas along GWMP – North still consist of impressive glimpses of the Potomac River Gorge, Washington, DC, and the spires of Georgetown, from both the bridges and the roadway itself. Drivers in the southbound lanes in particular are greeted with stunning views of the Washington Monument, while travel in both directions showcases the majestic contours and rocky outcrops of Georgetown and the Potomac River Gorge. Although development of Rosslyn, Virginia, and the Georgetown and Palisades neighborhoods of Washington, DC have made views from the parkway less wooded than they were previously, many of the most striking views have been preserved through the protection of the river shore from development and the continuing visibility of downtown DC including

the Capitol, the Old Post Office, and the Washington Monument. Still, the maturation and growth of vegetation along the parkway has gradually encroached upon these views, imperiling and in some cases entirely blocking the designed vantage points once afforded by the layout of the roadway and associated overlooks. This does not represent a permanent change to the landscape, however. The views and vistas available along the north section of the GWMP thus retain a moderate level of integrity, as they have decreased substantially since the historic period of significance.

Many of the small-scale features along the north section of the GWMP, such as signs and gates, are modern additions to the parkway, made necessary by its continuing popularity and use. However, this section of the roadway also includes curbs, gutters and 128 culverts built as part of its original design, all of which continue to serve an important purpose in the parkway's drainage and overall function. Installed during the historic period of significance, these features have undergone various repairs over the years, but have remained largely unchanged in use and form. As a result, the small-scale features of GWMP – North retain a moderate level of historic integrity.

The forty-eight known archeological sites present in the north section of the GWMP contain a rich store of knowledge ranging from early Native American settlement to historic use by European colonists and their descendants. Most of these sites have been surveyed using Phase I Archeological Investigation and remain largely undisturbed. As a result, they have changed little since the historic period of significance, and retain a high level of integrity.

The Seven Aspects of Integrity

1. Location – Due in part to its development before suburban growth took hold in Arlington and Fairfax Counties, the boundaries of GWMP – North have remained constant since its construction between 1930 and 1963. With the authorization provided by the Capper-Cramton Act of 1930, Congress was able to appropriate funds for land acquisition along the western edge of the Potomac River, and plans for development of the parkway's north section advanced. Land purchases by the NCP&PC, later known as the NCPC, since then allowed completion of the roadway to the Capital Beltway, and its boundaries have stayed the same ever since. As a result, the location of this section of GWMP has a high level of integrity to the historic period of significance.

2. Design - The design of the north section of the GWMP retains a high level of integrity, thanks to the preservation of the great majority of its original elements. The curving route and overall layout of the parkway reflects the composition and use of the surrounding landscape, as well as the rising importance of automobile transportation between 1930 and 1963. The series of bridges, culverts, stone masonry guardwalls, overpasses, overlook areas, and vegetation that line and support its length together represent a cohesive design characteristic of this period. Sweeping bridges, innovative for their time, still grace the intermittent breaks in the topography, connecting stretches of a winding roadway that hugs the palisades only with the aid of meticulous engineering. The original drainage system remains in place and continues to function, though with varying efficacy. Although many views have disappeared due to encroaching vegetation, intermittent breaks in the vegetation still reveal carefully designed views of the Potomac River Gorge, Georgetown, and the iconic monuments of

Washington, DC, just as the parkway's planners intended.

3. Materials - Many of the materials used to shape the original cultural landscape of GWMP – North remain. From the locally-quarried stone facing of the Lower Level Spout Run Bridge and the original granite copings of wing walls, to the variously sized and colored boulders of the stone masonry guardwalls, to the concrete piers and abutments of the overpasses and other bridges, little has changed along this section of the parkway. Although they do not agree with the earlier features in style or craftsmanship, many of the more recent concrete core, stone faced masonry guardwalls along the parkway were constructed using the same native mica schist used in earlier features of the roadway. Other small replacements and modifications have been made to various bridges and guardwalls, and the roadway itself has been repaved to meet modern standards. However, the materials in this cultural landscape have been preserved overall, and therefore retain a high level of integrity to the historic period of significance.

4. Association - The parkway's association with the planning of Washington, DC and engineering advances of the early 1950s is clearly evident, not only in its continuing function as a transportation route, but in its well-preserved historic bridges and other features. Its name also connects the parkway to the commemorative and historical purpose for which it was originally intended, to remember the life and accomplishments of George Washington. The association of GWMP – North therefore retains a high level of historic integrity.

5. Feeling - Much of the magnificence embodied by the original GWMP – North remains today. Despite the addition of a few buildings and safety features, the general growth of vegetation, and the substantial increase in traffic along the roadway, its various historic elements still combine to offer the visitor a taste of the mid-twentieth century parkway aesthetic. Pulling into the slow lane, it is possible to glimpse some of Washington, DC's most beautiful sights while taking in the rich, green woodlands lining the roadway. Views today are framed by rustic stone guardwalls and woody vegetation similar to what would have existed historically, though the latter has in some places increased. As a result, the feeling of this cultural landscape thus retains a moderate level of integrity to the historic period of significance.

6. Setting - The setting in which the north section of the GWMP is located has changed substantially since the historic period of significance. In particular, the areas of Virginia that border the parkway have grown into proper suburbs of Washington, DC, whose thousands of residents often use the roadway for transport to and from their city workplaces. Nonetheless, landscapes are living and evolving entities that require examination as a continuum, rather than as the embodiment of a particular time period. In this sense, the physical environment of the parkway has remained relatively unaltered. It continues to skirt gracefully along the edge of the Potomac River, connecting Spout Run Parkway to the Capital Beltway, and still winds its way gracefully through a wooded band separating the river from the nearby bustle of metropolitan life. The historic setting is further enhanced by certain surviving elements of the parkway itself, such as the sweeping bridges and scenic overlooks, and the natural slopes and escarpments of the Potomac Palisades. Thus, this aspect still helps to facilitate interpretation of the roadway's historic period of significance, and retains a moderate level of integrity.

7. Workmanship - The original workmanship of GWMP – North is evident in many of the surviving landscape features, including the 1950s concrete and steel plate girder composition used for most of the bridges. It can also be seen in the stone masonry work of the historic guardwalls, whose deep set, variable-width mortar joints and patterns of random stones have the appearance of a dry-laid stone wall. The giant boulders and rough outer faces of these historic stone masonry walls are unique, representing the particular craftsmanship of the 1930s through the 1950s. Over the years, the stone repair work that has taken place along the parkway has not replicated this earlier workmanship. Evidence of these repairs can be found in places where the mortar was applied too heavily and speckles the adjacent stones, resulting in a look that is very different from that of the original deep set joints. As for the various stone walls that have replaced the earlier structures since the 1970s, these have also deviated from the original design in their size as well as the smooth alignment and small size of the stones used. Consequently, the workmanship of this cultural landscape retains a moderate level of integrity.

CONCLUSIONS

GWMP – North is one of several important parkways in the National Capital Region which together have played a fundamental role in shaping the overall regional planning and development of the Washington metropolitan area. More specifically, it is recognized for its exemplary landscape and for its commemoration of George Washington. This cultural landscape is moreover distinguished by its engineering achievements, which are set against the backdrop of scenic views to the Potomac River Gorge, Potomac Palisades, and the District of Columbia monumental core.

This CLI finds that the north section of the George Washington Memorial Parkway retains integrity to its historic period of significance, 1930 to 1963. Since then, the landscape has been altered only slightly as the growth of vegetation has increased, certain safety railing features were added, and structural repairs were made. Even with these alterations, however, the ongoing use of this section of the roadway for both transportation and recreation has helped to preserve its original intent, and thus it still represents the character of the historic parkway that existed from 1930 to 1963.

Landscape Characteristic:

Natural Systems and Features

Historic Conditions

The waterway known today as the Potomac River formed gradually during the geological formation of the current Washington, DC metropolitan area, as the Piedmont Plateau lifted and a series of smaller streams merged into a single river. As it flowed southward toward sea level and what is now the Chesapeake Bay, this giant water course eventually carved out a narrow ravine that is now known as the Potomac River Gorge. The cliffs of this gorge, also known as the palisades, run alongside the current GWMP – North and are marked in this section by the dense, old-growth forests of Turkey Run Park. Running south along this route, the land transitions from the Upland Piedmont physiographic province in the north to the Coastal Plain physiographic province in the south. In the future location of Turkey Run Park, the blend of

basic rocks such as amphibolite, hornblende, gabbro, tonalite, and soapstone included in the underlying metasedimentary rocks fostered soils that support a lush green understory rich with a wide variety of plants. Further north, Great Falls crashed the brown waters of the Potomac River over rocks and through tumbling rapids. It was in this landscape of stark cliffs and wide, brown river that the parkway planners envisioned their road, as both an opportunity for engineering feats and the appreciation of breathtaking scenery.

Judging from the contract drawings for the Spout Run Lower Level Bridge, site preparations for this structure involved the relocation of Spout Run to create the desired profile grade for the new roadway. The extent to which this shift affected the stream itself is unknown.

Existing Conditions

Today, the same natural systems and features that existed here in the 1930s still survive. As the river flows by below GWMP – North, it begins to lose speed and widen beneath the steep cliffs of the Potomac Palisades. Upon reaching Spout Run, the Potomac River widens still further and slows to an almost glass-like appearance south of Alexandria. Each of the small streams, or runs, that flow down the Palisades and into the river offer glimpses of deep, lush gorges whose crossing by way of a succession of bridges has become one of the parkway's greatest characteristics.

Since the parkway was intended in part to appreciate the unique landscape and views of the Potomac Palisades and Potomac River Gorge, its construction was carefully engineered to produce a minimal impact on the surrounding landscape. Small rock outcroppings surrounded by original vegetation still exist in the wider stretches of median, particularly north of the Route 123 Interchange and in the vicinity of the Turkey Run Park Intersection. In addition, a number of culverts were built along the length of GWMP – North in order to allow smaller streams to pass beneath the roadway with the least possible disturbance. The relocations of Spout Run and Pimmit Run stand as the only major modifications documented during construction of the roadway, and do not appear to have had a substantial impact on the character of the landscape or the overall quality of the streams. As a result, these natural systems and features have remained virtually unchanged since the first section of GWMP – North was built in the 1930s, and contribute to the historic character of the cultural landscape.

Character-defining Features:

| | |
|--------------------------------|-------------------|
| Feature: | Potomac Palisades |
| Feature Identification Number: | 136858 |
| Type of Feature Contribution: | Contributing |
| Feature: | Potomac River |
| Feature Identification Number: | 136860 |
| Type of Feature Contribution: | Contributing |

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George Washington Memorial Parkway

Feature: Potomac River Gorge

Feature Identification Number: 136862

Type of Feature Contribution: Contributing

Feature: Spout Run

Feature Identification Number: 136864

Type of Feature Contribution: Contributing

Feature: Windy Run

Feature Identification Number: 136866

Type of Feature Contribution: Contributing

Feature: Pimmit Run

Feature Identification Number: 136868

Type of Feature Contribution: Contributing

Feature: Unnamed tributary of Pimmit Run

Feature Identification Number: 136870

Type of Feature Contribution: Contributing

Feature: Gulf Branch

Feature Identification Number: 136872

Type of Feature Contribution: Contributing

Feature: Donaldson Run

Feature Identification Number: 136874

Type of Feature Contribution: Contributing

Feature: Turkey Run

Feature Identification Number: 136876

Type of Feature Contribution: Contributing

Feature: Dead Run

Feature Identification Number: 136878

Type of Feature Contribution: Contributing

Feature: Rock outcroppings surrounded by original vegetation in median

| | |
|--------------------------------|---------------------------------------|
| Feature Identification Number: | 136880 |
| Type of Feature Contribution: | Contributing |
| Feature: | Small streams accomodated by culverts |
| Feature Identification Number: | 140396 |
| Type of Feature Contribution: | Contributing |

Spatial Organization

Historic Conditions

The north section of the GWMP was constructed in segments, one from Spout Run to the CIA Interchange, between 1956 and 1959, and a second from there to the Capital Beltway, from 1959 to 1963. In order to complete the first stage of construction on this north section of the parkway, Spout Run Parkway was realigned (HAER VA-80 1994). Thus, despite the temporal distinction between these two segments, the finished parkway achieved a seamless, continuous corridor.

The most notable physical characteristic of the new roadway was the separation of the northbound and southbound lanes into two different grade alignments. The placement of the southbound lanes (from the Capital Beltway towards Mt. Vernon) on a higher elevation allowed for views of the Potomac River Gorge, Georgetown, and Washington, DC over the northbound lanes. In those stretches where the southbound lanes were at a lower elevation, views were directed straight ahead, to an approaching hill or bend in the road before the road gave way to a wider, more expansive median. Views from the northbound lanes were also carefully varied, while the variable width of the grassy median served an important purpose in emphasizing the unique nature of the surrounding topography. The flexible, constantly shifting width of the grassy shoulder along the parkway further emphasized this effect.

Existing Conditions

The spatial organization of the north section of the GWMP today remains almost unchanged from how it was during the historic period of significance. The roadway corridor, with its separate grade alignments for northbound and southbound lanes, has continued to be a critical characteristic of the landscape, and no changes in either alignment or grade have been undertaken (Figures 7a and 7b).

Likewise, the distinctive variable width median and grass shoulders that marks the length of the parkway have not been altered since the parkway's construction. From the Capital Beltway to the Chain Bridge Road interchange, and between Donaldson and Spout Runs, the grassy, occasionally wooded median averages a width of more than 32 feet, while its average width from the Chain Bridge Road interchange to Donaldson Run is reduced to approximately 9 feet wide (EarthTech, 2003). The varying width of this space, and the plantings within it, add crucial definition to the roadway and its surrounding landscape (see Figures 7a and 7b). The wide

selection of median plantings also represent an important remnant of the parkway's historic design. Some medians have single trees planted in a straight line, while others have clusters of trees in the middle, or small groups positioned to one side of the median or the other so as to manipulate the cone-shaped line of vision available to drivers. Indeed, this section of the GWMP constantly alternates between narrow passageways, simulated by the stretches of thin median and associated plantings, to open, expansive perspectives facilitated by broader strips of median with few plantings. In many places, the width of the grassy shoulder, frequently marked by stone guardwalls, provides additional structure and shape to these changing spaces.

Thus the variable width medians and grassy shoulders, combined with the distinct difference in alignment and grade between the travel lanes, serve as important components of the roadway corridor. As a result, these features retain a high level of integrity and contribute to the historic character of the parkway.

Character-defining Features:

Feature: Variable width grass and woody medians

Feature Identification Number: 136882

Type of Feature Contribution: Contributing

Feature: Variable width grass shoulder

Feature Identification Number: 136884

Type of Feature Contribution: Contributing

Feature: Separate northbound and southbound grades and alignments

Feature Identification Number: 136886

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Figure 7. Two photographs illustrate the varied alignment of GWMP – North: (a) Heading northbound just south of the Route 123 Interchange; and (b) Looking north along the grassy median north of Windy Run (CLR CLP 2009).

Land Use

Historic Conditions

The original section of the George Washington Memorial Parkway, or the MVMH, was designed to provide a driving experience for tourists heading to Washington's former home, Mount Vernon. With the passage of the Capper-Cramton Act in 1930, plans to expand the MVMH began to take shape. The new parkway was to include roadways on both sides of the Potomac River, to save stretches of land historically associated with George Washington and extending from his home up to Great Falls, where his work was instrumental in development of

the Patowmack Canal. However, the subsequent onset of the Great Depression, World War II, and the Korean War meant that funding for the project was unpredictable. The parkway did not reach Spout Run until 1949, while further expansion had to wait until the mid-1950s, when the CIA decided to locate its new headquarters in Langley, Virginia. In these earlier years of its use, the north section of the GWMP was an almost purely recreational attraction, popular for its breathtaking vistas and wooded charm.

With its extension to Langley to provide transportation to the new CIA Headquarters, the parkway took on a new meaning. This shift in use not only allowed the parkway to extend by furnishing the necessary funds, but it gave the roadway a defined role in the growth and development of the Washington metropolitan area. As a result, the CIA Overpass represents the changing use of GWMP – North, from a recreational drive to a more functional roadway.

The change in use of the parkway was further emphasized by new attitudes about automobile transport. By 1957, the American driving experience was no longer contained to a recreational pastime. Great technological strides had been made in the design and construction of automobiles, roads, and bridges, and America was rapidly on its way to becoming a land of cars and interstate highways. Planners began to view the GWMP not only as an opportunity for recreation, but as a road in relation to other roads and transportation networks. Less than a decade later, the new and preferred use of the GWMP became clear when Representative Joel Broyhill asked the NPS to raise the parkway speed limit from 40 mph to 50 mph.

Existing Conditions

Since the 1950s and 1960s, recreational use along the length of the GWMP has increased, highlighted by the establishment of playing fields and improvement of picnic grounds and other amenities along the MVMH. The multiple-use Mount Vernon Trail has also been established along the southern portion of the roadway, and is a popular destination for walking, jogging, and bicycling. Due to its steep terrain and curving alignment, the north section of the GWMP has been targeted for a slightly more exclusive recreational use. The Potomac Heritage National Scenic Trail, originally initiated in 1974 but still growing, runs parallel to the GWMP as it travels north, but is rather challenging for the recreational hiker or for young children. Traversing the steep terrain along the banks of the river, it leads up to the Capital Beltway through Turkey Run Park, where additional hiking trails and picnic areas are provided. As a result, both the recreational and transportation uses of GWMP – North have remained constant over the years, and contribute to the historic character of the cultural landscape.

Character-defining Features:

| | |
|--------------------------------|----------------|
| Feature: | Transportation |
| Feature Identification Number: | 136888 |
| Type of Feature Contribution: | Contributing |
| Feature: | Recreation |

Feature Identification Number: 136890

Type of Feature Contribution: Contributing

Topography

Historic Conditions

The north section of the GWMP, leading from the Spout Run Parkway to the Capital Beltway/Interstate 495, is located within the Piedmont Upland physiographic province. The natural topography along this stretch of the parkway is characterized by a steady uphill climb, in stark contrast to the more level coastal plain that marks the MVMH section to the south. Since its construction, this variation in grade has enhanced the parkway experience, offering pleasant new views and a wilder, more wooded atmosphere in contrast to southern portions of the roadway.

Elevations in the north section of the GWMP range from approximately 100 to 200 feet above sea level. The cliffs have an approximate 150-foot vertical drop at Glebe Road and a slope of nearly one to one, resulting in dramatic scenery. This distinctive topography has influenced land uses over time. For example, archeological studies indicate that Native American Indians utilized rock outcroppings for obtaining the necessary lithic materials to manufacture stone tools. They also made use of the crevices and caves formed by the cliffs of the Potomac Palisades for rock shelters. Following the European settlement of the area, these cliffs were quarried for building stone. During the Civil War, the natural topography was once more utilized in building Fort Marcy, one of the fortifications established around Washington, DC. Earthworks were constructed on a high point overlooking the Georgetown and Leesburg Turnpike and Chain Bridge to protect the city from invasion by Confederate forces.

During the planning and construction of the north section of the GWMP, the rolling hills and steep terrain of this area influenced the placement and design of the roadway. According to the HAER documentation of the parkway's bridges, "engineers claimed [the terrain] was some of the most rugged in northern Virginia" (HAER VA-69 1994). These steep, rocky slopes had previously deterred development of the palisades, and one of the most difficult aspects of bridge construction along the parkway was how to secure the necessary cranes and other equipment in the deep cuts and ravines.

Nonetheless, since the preservation of views to the Potomac River were a key component in the legislation that created the GWMP, planners and engineers went great lengths to manipulate the roadway, vegetation, and small scale features in concert with one another in order to maximize this characteristic of the roadway.

Existing Conditions

Much as it did historically, the topography of GWMP – North continues to impress visitors to the parkway today. Whether driving from Mount Vernon to the Capital Beltway, or vice versa, the rolling hills and winding curves add interest and drama to the ride, for tourists and

commuters alike. The topography of the parkway therefore retains a high level of integrity to the historic period of significance, and contributes to the historic character of the cultural landscape.

Character-defining Features:

Feature: Potomac Palisades
Feature Identification Number: 136892
Type of Feature Contribution: Contributing

Vegetation

Historic Conditions

From the time of its construction, vegetation throughout the GWMP has been a carefully planned blend of preserved natural forest with planted ornamentals and native species. Associated with the Basic Mesic Forest, this area has been characterized by a wide range of vegetation including various species of oak (*Quercus* sp.), basswood (*Tilia americana*), white ash (*Fraxinus americana*), tulip poplar (*Liriodendron tulipifera*), yellow buckeye (*Aesculus flava*), black maple (*Acer nigrum*), sugar maple (*Acer saccharum*), southern sugar maple (*Acer barbatum*), American beech (*Fagus grandifolia*), bitternut hickory (*Carya cordiformis*), and black walnut (*Juglans nigra*). Shrubs and other understory plants typical of this forest type include paw-paw (*Asimina triloba*), painted buckeye (*Aesculus sylvatica*), twinleaf (*Jeffersonia diphylla*), harbinger-of-spring (*Erigenia bulbosa*), lowland brittle fern (*Cystopteris protrusa*), and toadshade (*Trillium sessile*) (Virginia Department of Conservation and Recreation 2009).

The specific characteristics of the parkway topography and environment further influenced the types of vegetation that grew there. For example, the section of roadway between Pimmit Run and Spout Run was heavily influenced by the steep slopes of the Arlington bluffs. The particular mixture of rock found in the soils north of the CIA Interchange meanwhile helped to foster a lush, unique upland forest community that predates the historic period of significance for the parkway by almost 200 years.

In addition to this native woody vegetation, a series of National Park Service planting plans aimed to complement the careful design of the GWMP – North corridor. These plans supplied an overall theme for the parkway which, for much of its length, provided a mixed and fairly thin layer of understory plants as a foreground to the backdrop of native forest. Median and interchange plantings meanwhile added a similar spread of understory ornamentals to the carefully designed landscape of the parkway. In keeping with the overall philosophy of the parkway, planting plans for each section aimed to compliment and respond to the existing environmental conditions.

In order to facilitate an understanding of the various types of vegetation discussed below, plantings are divided into four types: shade trees (or deciduous hardwoods), understory trees (or trees of intermediate height, a number of which also have showy flowers), evergreen trees, and

shrubs. See Appendix A, in the Supplemental Information Chapter, for a listing of the species included in each vegetation type. Each of the sections below addresses the various designed parkway landscapes individually and as they were laid out by the NPS during the historic period of significance. The station numbers throughout this chapter refer to those assigned historically by the Land Use and Maintenance Plans of the National Park Service (DSC TIC 850/81524) drawn up in the late 1950s or 1960s.

SPOUT RUN PARKWAY TO ROUTE 123 INTERCHANGE (STATION 128.50 TO 306)

An NPS Planting Plan from 1959 (DSC TIC 850/80650) outlines the various types of vegetation that were anticipated for the section of roadway between Spout Run Parkway and the Route 123 Interchange. In addition to the native vegetation that existed along either side of the parkway when it was built, the park planned to plant an immense number of flowering dogwoods (*Cornus florida*), or a total of 2,439, along either side and in the median of this section of the GWMP. Other popular understory trees and shrubs (over 400 each) intended for this area were eastern redbud (*Cercis canadensis*), nannyberry (*Viburnum lentago*), and blackhaw (*Viburnum prunifolium*). The 1959 plant list (DSC TIC 850/80650), which does not name any non-natives for this section of parkway, also includes: red maple (*Acer rubrum*), tupelo (*Nyssa sylvatica*), northern red oak (*Quercus borealis*), scarlet oak (*Quercus coccinea*), pin oak (*Quercus palustris*), shadblow serviceberry (*Amelanchier canadensis*), southern arrowwood (*Viburnum dentatum*), and white fringe tree (*Chionanthus virginicus*).

Certain patterns can be seen in the plantings made along this section of the parkway. The narrow width of the median from south of Donaldson Run to north of Pimmit Run (Station 195 to 280) prohibited the planning of any plantings for that stretch of parkway. Nor were there any plantings designed for the South Donaldson Scenic Overlook. However, at the North Donaldson Scenic Overlook the anticipated plantings included tupelo, flowering dogwood, southern arrowwood, and nannyberry. There was no shadblow serviceberry or eastern redbud planned for any section of the median along this part of the parkway, while the northern red oak was mostly intended for the strip of roadway between Pimmit Run and the Route 123 Interchange. Two sections of unusually broad median, from north of Windy Run to the South Donaldson Scenic Overlook and from north of Pimmit Run Bridge to immediately south of the Route 123 Interchange, were designed with small clusters of trees separated by open, grassy sections seeded with an herbaceous mix. This open aspect and the long breaks in median vegetation were crucial to the designed views and vistas of the parkway, which in these areas were made possible by the elevation of the southbound lanes above the northbound ones.

ROUTE 123 INTERCHANGE PLANTINGS (STATION 306 TO 322)

The 1959 Planting Plan identifies a large variety of plantings for the intersection between GWMP and Virginia Route 123 (DSC TIC 850/80650). Due to a number of distinctions between the north and south sides of the interchange, they are treated separately in the following paragraphs.

On the south side of the interchange, the NPS planned to plant a great number (a hundred) of Carolina buckthorn (*Rhamnus caroliniana*) and a fair number (twenty or more each) of the following species: eastern redbud, white fringe tree, flowering dogwood, American witchhazel (*Hamamelis virginiana*), winged sumac (*Rhus copallina*), southern arrowwood, blackhaw, and the non-natives, softleaf arrowwood (*Viburnum molle*) and glossy buckthorn (*Rhamnus frangula*). Other non-native plants intended for this area included London planetree (*Platanus hybrida*), Japanese flowering crab apple (*Malus floribunda*), Scheidecker crab apple (*Malus scheideckeri*), and American cranberrybush (*Viburnum trilobum*).

The 1959 plant list (DSC TIC 850/80650) for the south side of the Route 123 Interchange also includes: red maple, tupelo, northern red oak, scarlet oak, pin oak, shadblow serviceberry, American hornbeam (*Carpinus caroliniana*), Washington hawthorn (*Crataegus phaenopyrum*), eastern redcedar (*Juniperus virginiana*), white pine (*Pinus strobus*), red chokeberry (*Aronia arbutifolia*), gray dogwood (*Cornus racemosa*), American hazelnut (*Corylus americana*), northern spicebush (*Lindera benzoin*), smooth sumac (*Rhus glabra*), staghorn sumac (*Rhus typhina*), and nannyberry.

On the whole, the roadway leading into the interchange from the south was intended to be marked by scattered plantings of the understory trees including shadblow serviceberry, eastern redbud, white fringe tree, and especially flowering dogwood. In contrast, planning for the inside of the southern lobe of the cloverleaf and the section of grass by the south entrance to the GWMP involved plantings of Washington hawthorn, Japanese flowering crab apple, Scheidecker crab apple, and some shadblow serviceberry. This understory was then incorporated with a few of the larger, more imposing trees including eastern redcedar, white pine, tupelo, London planetree, northern red oak, scarlet oak, and pin oak.

As for the north side of the Route 123 Interchange, a high number of glossy buckthorn, a non-native, were planned. Large numbers (twenty or more each) of the following plants were also intended for this area: white fringe tree, flowering dogwood, eastern redcedar, redosier dogwood (*Cornus stolonifera*), staghorn sumac, and another non-native, kousa dogwood (*Cornus kousa*). Several other non-native plants appear on the 1959 plant list for the north side of the interchange, including: London planetree, Japanese flowering crab apple, Scheidecker crab apple, bloodtwig dogwood (*Cornus sanguinea*), softleaf arrowwood, and American cranberrybush.

Other vegetation that appears on the 1959 plant list for the north side of the Route 123 Interchange is: red maple, tupelo, northern red oak, pin oak, shadblow serviceberry, American hornbeam, eastern redbud, Washington hawthorn, white pine, American holly (*Ilex opaca*), red chokeberry, gray dogwood, American hazelnut, American witchhazel, northern spicebush, Carolina buckthorn, winged sumac, smooth sumac, southern arrowwood, nannyberry, and blackhaw.

Similar to the layout on the south side of the interchange, the vegetation intended to mark the roadway leading up to the interchange on the north side included a high number of flowering dogwood and some other understory trees, including shadblow serviceberry, eastern redbud, white fringe tree. The plans for the areas inside and around the two northern lobes of the cloverleaf once again create a contrast to this layout, with plantings of both types of crab apple, Washington hawthorn, and more flowering dogwood as well as some of the larger trees: red maple, London planetree, and the three oak species. A number of the three oak types and a tupelo were also planned for the northeast shoulder of the roadway as it leaves the interchange. Several clusters of existing trees along the outsides of the cloverleaf were left untouched by the planting plan.

ROUTE 123 INTERCHANGE TO CIA INTERCHANGE (STATION 322 TO 385)

All of the plantings listed on the 1959 Planting Plan for the section of GWMP – North between the Route 123 and CIA Interchanges are native species, a move perhaps related to the neighboring rare and native plant community of the future Turkey Run Park (DSC TIC 850/80650). The species intended for the greatest number of plantings (more than a hundred each) along this stretch of roadway included eastern redbud, flowering dogwood, northern spicebush, and mountain laurel (*Kalmia latifolia*). Other vegetation on the 1959 plant list (DSC TIC 850/80650) for this section is: red maple, tupelo, northern red oak, pin oak, sugar maple (*Acer saccharum*), shadblow serviceberry, American hornbeam, white fringe tree, eastern redcedar, American holly, red chokeberry, American hazelnut, American witchhazel, and southern arrowwood. The plans for this section also include a few understory trees and shrubs that either do not appear in the designs for other parts of GWMP – North, or appear only within this area or north of it. Common persimmon (*Diospyros virginiana*) and Virginia pine (*Pinus virginiana*) are listed exclusively for planting here, while hophornbeam (*Ostrya virginiana*) and mapleleaf viburnum (*Viburnum acerifolium*) are identified for planting only in this section or areas north of here.

For the most part, the NPS planned to spread an assortment of these various types of vegetation along the roadway between the Route 123 and CIA Interchanges. Along the median of this section of parkway a consistent mix of tupelo, northern red oak, pin oak, shadblow serviceberry, and flowering dogwood was planned. American holly was only intended for the northern-most section of this area (northbound between Stations 370 and 385, and southbound between Stations 354 and 385). A greater number of evergreens appear to have been built into the design for the southern end of this part of the parkway. The planting of white pine was planned only for one section next to the southbound lanes (between Stations 338 and 354), while that of Virginia pine was intended mostly for the southern section (northbound between Stations 322 and 338, and southbound between Stations 322 and 370). Plantings of eastern redcedar were generally planned for the same areas as Virginia pine.

CIA INTERCHANGE AREA PLANTINGS (STATION 385 TO 401)

Similar to the variety in vegetation evident at the Route 123 Interchange, a broad range of plantings was planned for the CIA Interchange, as detailed in the 1962 Planting Plan (DSC TIC 850/80727). Due to a number of distinctions between the north and south sides of the interchange, they are treated separately in the paragraphs below.

The species that the NPS planned to plant in the greatest numbers on the south side of the CIA Interchange were, in a deviation from the pattern set by the rest of GWMP – North, American hazelnut and blackhaw. Nor were any of the usual shrubs planned for this area. Instead, the species identified for planting on the south side of the interchange include mostly shade, understory, and evergreen trees, namely: red maple, sugar maple, tupelo, northern red oak, pin oak, black oak, shadblow serviceberry, American hornbeam, eastern redbud, white fringe tree, flowering dogwood, hophornbeam, eastern redcedar, white pine, and American holly. In addition, two new species were planned for this area that had not previously been designed for GWMP – North: the shade tree, blue ash (*Fraxinus quadrangulata*), and the understory tree, black cherry (*Prunus serotina*).

On the whole, the plantings outlined for the south side of the CIA Interchange in 1962 involved a relatively thin scattering of vegetation, as compared to what was designed for the Route 123 Interchange (DSC TIC 850/80727). Instead, the NPS intended to leave much of the pre-existing vegetation in this area untouched. Inside the single cloverleaf lobe at the CIA Interchange, the density and ratio of shade trees to understory trees is similar to, but largely different in species from, what was planned for the earlier interchange. The one exception to this pattern are the white pine, whose location in the spaces between the entrance and exit lanes and the parkway strongly recall the layout of the cloverleaf lobes at Route 123. Still, the intended plantings at the CIA Interchange represent a slight deviation from what was planned for the earlier sections of GWMP – North, as hinted by these distinctions and the addition of blue ash and black cherry to the plant list, and thus reflect the changing preferences of the time.

Various other patterns of vegetation can be distinguished on the south side of the CIA Interchange. Just south of the CIA Overpass, on either side of the parkway, the NPS planned to leave standing two clusters of pre-existing sumac (*Rhus* sp.) and locust (*Robinia* sp.), a use of pre-existing vegetation that was similarly used in designs for the Turkey Run Park Intersection to the north. American hornbeam was planned only for the patch of grass in between the northbound exit and entrance lanes and the parkway, and for the west side of the southbound entrance to the GWMP. A scattering of evergreen trees was intended for the outer edge of the entrance and exit lanes of the interchange, providing some continuity with the similar plantings designed for the inner spaces between these lanes and the parkway. On the approach to the CIA Overpass, the median plantings were designed in small groupings of two or three, and consisted mostly of understory trees (eastern redbud or flowering dogwood south of the interchange; either of these or shadblow serviceberry to the north) but also, in several instances north of the interchange, of shade trees (red maple, sugar maple, northern red oak, or pin oak).

Similar to the design for the south side of the CIA Interchange, on the north side large areas of pre-existing hardwoods and conifers were left standing near the edge of the roadway and the south exit lane. Between the perimeter of these woods and the lanes carrying motorists a fairly dense spread of vegetation was then laid out, including a selection of the same plant types seen elsewhere along the parkway. These included, in the largest numbers (more than twenty each), northern red oak, flowering dogwood, and, notably, white pine. As mentioned, other species on the 1962 plant list (DSC TIC 850/80727) are fairly limited, including: red maple, sugar maple, scarlet oak, shadblow serviceberry, eastern redbud, eastern redcedar, American holly, winged sumac, staghorn sumac, and mountain laurel.

As on the southern side of the interchange, the median plantings here are spaced out in groups of two or three, usually including one or two shade trees and a couple of understory trees. In the absence of a median wall, this design of tree groupings offered an intermittent but clear view of the opposite lanes, and only lightly marked the central space with greenery.

Certain patterns are once again discernible in the NPS design for the north half of the CIA Interchange plantings. Just north of the CIA Overpass, in the space between the parkway's southbound lanes and the southbound exit lane, an unusually dense cluster of shade trees was planned, including maples and oaks. In a possible effort to echo the natural stands of sumac and locust along the parkway and interchange lanes south of the CIA Overpass, a cluster of sumac was also intended for the parkway side of the southbound exit lane. However, in contrast to the south side of the interchange, no evergreen trees were planned for planting along the exit lane or in close proximity to the overpass. Instead, the plans depict a scattering of white pine and American holly only north of the point where the south exit lane leaves the parkway. A very dense cluster of these trees was also intended for the corner just before the Park Headquarters entrance next to the northbound lanes of the roadway. Relative to the number of other evergreen trees (38 total), very few (four) eastern redcedar were designed for this half of the interchange.

In addition the north side of the CIA Interchange, whose circulation pattern involves the merging of a single entrance lane from the southbound side of the parkway, has a limited plant list that matches its more simplistic spatial layout. Unlike the designs for the more complicated south side of the interchange, which include a wide variety of vegetation, the relative simplicity of the plans for the north side reflect this difference. Plantings intended for the north side included only three types of understory tree (shadblow serviceberry, eastern redbud, and flowering dogwood) and four kinds of shade trees (red maple, sugar maple, northern red oak, and scarlet oak). Still, what was lost in the variety of these types of vegetation was partially made up by the addition of a few shrubs (winged sumac, staghorn sumac, and mountain laurel), which do not appear at all in plans for the south side.

TURKEY RUN PARK INTERSECTION AREA PLANTINGS (STATION 401 TO 442)

The vegetation designed by the NPS for the Turkey Run Park Intersection is detailed below, as

outlined in the 1962 Planting Plan (DSC TIC 850/80727). Due to the various distinctions between the north and south sides of the intersection, they are treated separately.

On the south side of the Turkey Run Park Intersection, the highest number (forty or more each) of plantings listed in the 1962 plans (DSC TIC 850/80727) consist of understory trees and shrubs of the following species: flowering dogwood, American hazelnut, southern arrowwood, linden arrowwood (*Viburnum dilatatum*), and mountain laurel. This was the first time that linden arrowwood had been selected for GWMP – North. Other vegetation identified by the plant list is similar to what appears elsewhere in GWMP – North: red maple, sugar maple, blue ash, northern red oak, scarlet oak, shadblow serviceberry, eastern redbud, white pine, American holly, American witchhazel, northern spicebush, winged sumac, staghorn sumac, and blackhaw.

Perhaps in part to emulate a more natural wilderness setting, the NPS planned to leave a number of pre-existing clusters of hardwood and conifer standing along the roadway south of the Turkey Run Park Intersection. In the plans these appear both in the median, in the two Turkey Run Road loops that connect to the entrance and exit lanes, and in the spaces between the entrance and exit lanes and the parkway. More generally, plantings of scattered evergreens, understory trees and a few shade trees were planned along the edges of this pre-existing vegetation, or on the sides exposed to passing motorists coming through, into or out of Turkey Run Park. Also of note, shrub plantings were entirely left out of the design for this side of the intersection, instead offering the less cluttered depth of understory trees next to, or most often in front of (as seen from the roadway) shade trees. A relatively dense cluster of maples and oaks was intended for the corner of the Park Headquarters entrance and next to the parkway's northbound lanes, perhaps to offer some balance against the cluster of evergreens planned for the opposite side of the entrance road (see section on CIA Interchange plantings).

The 1962 planting plan for the north side of the Turkey Run Park Intersection illustrates an unusually high number of shade trees, almost as if the design was intended to help the areas immediately beside the parkway and other road lanes blend in with the hardwood forest behind it (DSC TIC 850/80727). A large number (more than thirty) of these trees are identified in the plans as sugar maple. Other species with a high number of intended plantings in this area are eastern redbud and flowering dogwood, which was the highest of all. Like the southern side of the intersection, the plant list for the north side is fairly short and does not name any shrubs. It includes: red maple, tupelo, northern red oak, shadblow serviceberry, eastern redcedar, white pine, and American holly.

Similar to the design of the Turkey Run Park Intersection's south side, large portions of pre-existing hardwoods were identified for inclusion in the planned landscape of the north side, with an arrangement of smaller understory trees next to the road, or what would appear to a motorist to be in front of this natural forest. The highest density of shade trees is concentrated near the northern end of the intersection, near the point where Turkey Run Road passes beneath the parkway. Along the stretch of road just south of Turkey Run Bridge, plantings on

either side of the road include a few more shade trees and a large number of eastern redbuds and flowering dogwoods, in addition to a couple shadblow serviceberry. The median along this section is planted densely with the same mix of vegetation, with the exception of shadblow serviceberry.

Finally, perhaps in an additional effort to emphasize a more natural look along this section of the parkway, the shade and understory trees left by the NPS marked pre-existing rock outcroppings that were similarly undisturbed by the roadway.

TURKEY RUN PARK INTERSECTION TO CAPITAL BELTWAY (STATION 442 TO 506)

The NPS Planting Plan from 1962 also details the portion of parkway between the Turkey Run Park Intersection and the Capital Beltway (DSC TIC 850/80727). Once again, the species intended for the greatest number (more than 200 each) of plantings in this area were eastern redbud and flowering dogwood. Large numbers (one hundred or more) of the following were also included in the design for this area: American hazelnut, northern spicebush, blackhaw, linden arrowwood, mountain laurel, and the non-native glossy buckthorn.

Other species on the plant list for this landscape include: red maple, sugar maple, northern red oak, scarlet oak, pin oak, shadblow serviceberry, white fringe tree, Washington hawthorn, American holly, redosier dogwood, American witchhazel, mapleleaf viburnum, nannyberry, and red chokeberry. Several additional species identified by the planting plans for this area do not appear elsewhere along earlier sections of GWMP – North. These include white oak (*Quercus alba*), black oak (*Quercus velutina*), and silky dogwood (*Cornus amomum*). The silky dogwood was only planned for one small portion of this part of the parkway, close to the Turkey Run Park Intersection (between Station 442 and 447).

Several patterns can be distinguished in the layout plantings for this section of the parkway. Plantings of American holly, the only evergreen planned for this area, were intended to be confined entirely to the southern end (between Stations 442 and 455 both north- and southbound). Eastern redbud and flowering dogwood were planned for almost every portion of this landscape, on both north- and southbound sides. The non-native glossy buckthorn was intended exclusively as a median planting along this section, and is only listed near the southern end (from Station 442 to 453) and near the Dead Run Bridge (from Station 496 to 506).

Existing Conditions

Most of the vegetation found along GWMP – North today is native to the local area, and helps to shape the visitor experience year-round. The variety of trees and shrubs that grow here produce colorful blooms in the early spring, dazzling golds and reds in the fall, and a majestic, bare-branched woodland backdrop for winter views. The occasional evergreen, most often white pine or eastern redcedar, offers a pleasant accent to these mostly deciduous plantings,

while the placement of smaller flowering trees helps highlight the looming majesty of the larger hardwoods.

However, the generally minimal maintenance of the vegetation in this landscape has allowed trees and shrubs in some areas to grow beyond the size and stature for which they were originally intended, thus imperiling some of the parkway's famed vistas. Over the passing decades, the carefully engineered balance of woodland with openness has in certain places begun to blur. As a result, the vegetation of GWMP – North today retains a moderate level of historic integrity, overall.

The existing vegetation of GWMP – North can be divided into the following six areas: Spout Run Parkway to Route 123 Interchange, Route 123 Interchange Plantings, Route 123 Interchange to CIA Interchange, CIA Interchange Area Plantings, Turkey Run Park Intersection Area Plantings, and Turkey Run Park Intersection to Capital Beltway. Each of these are addressed separately below.

Please note that these descriptions address the same areas treated by the 1959 and 1962 Planting Plans created by the National Park Service. Thus, the vegetation types named here refer only to the trees, shrubs and vines documented immediately along the grassy shoulders or stone walls of the parkway corridor, and not the adjacent woodlands. Please see Appendix A, in the Supplemental Information Chapter, for a listing of plants and their scientific names.

SPOUT RUN PARKWAY TO ROUTE 123 INTERCHANGE (STATION 128.50 TO 306)

Along this section of the Potomac River, the 100 to 150-foot bluffs known as the Potomac Palisades plunge to the waters' edge, affording beautiful views to the east but also limiting the vegetation with the existence of factors such as soil erosion and exposure. In this area, narrow strips of upland forest periodically open up for views to the Potomac River, Georgetown, and Washington, DC, but the flowering native species found to the north are absent here.

The additional plantings of the late 1980s, though they appear to have been mindful of the original planting plans, resulted in some small changes to the cultural landscape along this section of GWMP – North. Moreover, invasive and volunteer vegetation has in many places overtaken the areas east of the parkway. These species threaten historic hardwoods such as oak and maple, some of which were planted by the NPS during the historic period of significance, and others like American beech, basswood, tulip poplar, and hickory that pre-date the historic period of significance. Particularly in recent years, invasive vegetation that does not contribute to the historic character of this section of the GWMP – North cultural landscape has increased. Both native and non-native, these species include, but are not limited to, princess tree (*Paulownia tomentosa*), sumac (*Rhus* sp.), porcelainberry (*Ampelopsis brevipedunculata*), English ivy (*Hedera helix*), and poison ivy (*Toxicodendron radicans*).

Many of the same species that were present during the historic period of significance can still

be seen along this portion of the parkway, including red maple, scarlet oak, pin oak, flowering dogwood, eastern redbud, white fringe tree, and shadblow serviceberry. Other species that grow here and are not included in the historic plantings are: American elm (*Ulmus americana*), black oak, common persimmon, osage orange (*Maclura pomifera*), and sweet cherry (*Prunus avium*). Contributing vegetation includes these trees and shrubs, whose original planting was laid out in the 1959 Planting Plan (DSC TIC 850/80650), and particularly the older examples of red maple, scarlet oak, pin oak, flowering dogwood, eastern redbud, white fringe tree, and shadblow serviceberry.

More generally speaking, some of the vegetation patterns that existed along this section of roadway during the historic period of significance still survive. For example, the North Donaldson Scenic Overlook still has much thicker vegetation than the South Donaldson Scenic Overlook, though the understory trees planned for the former are not currently present. Northern red oak can still be seen between Pimmit Run and the Route 123 Interchange, while the median between the area south of Donaldson run and north of Pimmit Run remains too narrow for any vegetation. The two sections of unusually broad median, from north of Windy Run to the South Donaldson Scenic Overlook and from north of Pimmit Run Bridge to immediately south of the Route 123 Interchange, are still populated with small clusters of shade and understory trees separated by open, grassy mown sections seeded with an herbaceous mix.

As a result, the vegetation along this section of GWMP – North retains a moderate level of integrity to the historic period of significance.

ROUTE 123 INTERCHANGE PLANTINGS (STATION 306 TO 322)

A comparison between the 1959 Planting Plan and the current conditions of the Route 123 Interchange indicates that between 75 and 85 percent of the trees and shrubs currently present remain consistent with what was laid out in the original landscape design (Figure 8; DSC TIC 850/80650). A diverse combination of species, both native and ornamental, were planted here in 1960. Those still present today include pin oak, red maple, northern red oak, scarlet oak, eastern redcedar, white pine, American holly, Japanese flowering crab apple and Scheidecker crab apple, eastern redbud, flowering dogwood, Washington hawthorn, shadblow serviceberry, American witchhazel, and the non-native London planetree (Figure 9). While some of these plantings are native to the region, others are ornamental cultivars. The American hazelnut planted here in 1960 is now the only known location of this species within GWMP. Many of these original specimens, and particularly the smaller ornamental trees, are nearing the end of their normal life expectancy. Since they are consistent with the 1959 Planting Plan (DSC TIC 850/80650), the presence and association of these particular species of trees and shrubs, more than their specific locations, contribute to the historic character of this section of parkway.

In addition, a number of the species listed on the 1959 plans (DSC TIC 850/80650) were either never planted or have since disappeared from this portion of the landscape. These include: tupelo, American hornbeam, blackhaw, northern spicebush, white fringe tree, nannyberry, red

chokeberry, American cranberrybush, and several types of buckthorn, sumac, and arrowwood, and four additional species of ornamental dogwood.

Tree species currently found at the interchange that were not included in the 1959 plans (DSC TIC 850/80650) include horse chestnut (*Aesculus hippocastanum*), American elm, and magnolia (*Magnolia* sp.). Due to their absence from the historic plans, these trees could be more recent additions to the landscape and therefore non-contributing features. However, if their size suggests an age greater than fifty years they could also be historic vegetation that was omitted from the 1959 landscape designs. Further research is therefore necessary to determine the origin of these trees and their consequent contribution to the historic character of the cultural landscape.

From a more general perspective, the patterns established for this section of the parkway by the early planting plans have for the most part been preserved. Larger shade trees are still accompanied in many places, particularly the inner lobes of the cloverleaf, by understory trees. Furthermore, these lobes are still distinguished by the distinctive evergreens, white pine and eastern redcedar, and the types of vegetation found here are in many cases different from those seen along the rest of the parkway corridor. The clusters of pre-existing woodland left untouched by the 1959 Planting Plan are likewise still evident in today's landscape, bordering the grassy shoulders of the interchange cloverleaf.

On the whole, thanks to the enduring presence of most of the original plantings established at the Route 123 Interchange in 1960, the vegetation along this section of the parkway retains a high level of integrity.

ROUTE 123 INTERCHANGE TO CIA INTERCHANGE (STATION 322 TO 385)

Although it does not contain the same types of unique vegetation found in the adjacent Turkey Run Park, similarly valued natural plant communities are known to exist along this section of the parkway, where a generally higher concentration of exotic plant species are located in the existing woodland (VDCR, 2005). Specific species included in the 1959 Planting Plan (DSC TIC 850/80650) and still found at this location include pin oak, red maple, northern red oak, eastern redbud, flowering dogwood, white fringe tree, shadblow serviceberry, American hornbeam, common persimmon, Washington hawthorn, crab apple, southern arrowwood, white pine, eastern redcedar, and American witchhazel. Due to the 1959 listing of these species in this general location, these trees and shrubs contribute to the historic character of the cultural landscape.

Several species were mentioned by the 1959 plans but were either never planted or have since disappeared from this area, including tupelo, sugar maple, American holly, Virginia pine, red chokeberry, American hazelnut, hophornbeam, northern spicebush, southern arrowwood, mapleleaf viburnum, and mountain laurel.

Additional tree species located along the roadway corridor in this area that do not appear in the 1959 plans (DSC TIC 850/80650) include: American elm, scarlet oak, tulip poplar (*Liriodendron tulipifera*), and white oak (*Quercus alba*). Depending on their age, these trees could be survivors from the historic period of significance that were simply omitted from the historic plans. Further research is necessary in order to determine their origins and, therefore, their contribution to the historic character of the cultural landscape.

Volunteer and invasive species including princess tree, sumac, porcelainberry, English ivy, and poison ivy have also grown into some of the gaps caused by tree falls or other disturbances. As more recent additions to the immediate parkway vicinity, these species do not contribute to the historic character of GWMP – North.

As for the general patterns of vegetation along this section of GWMP – North, they appear to have survived, in part. Evergreens including eastern redcedar, white pine, and Virginia pine still grow along the southern end of this area. The median along this section of the parkway still features clusters of shade and understory trees, although the tupelo mentioned in the 1959 plans is absent (DSC TIC 850/80650).

On the whole, the vegetation for this section of the parkway thus retains a moderate level of integrity.

CIA INTERCHANGE AREA PLANTINGS (STATION 385 TO 401)

Species identified by the 1962 Planting Plan (DSC TIC 850/80727) and still found at the CIA Interchange include red maple, sugar maple, northern red oak, pin oak, scarlet oak, blue ash, eastern redbud, flowering dogwood, shadblow serviceberry, white fringe tree, white pine, eastern redcedar, American holly, sumac, mountain laurel, and hophornbeam. The trees and shrubs among these whose locations are consistent with the 1962 Planting Plan thus contribute to the historic character of the GWMP – North.

Vegetation mentioned by the 1962 plans that was either never planted or has since disappeared from this area includes tupelo, black oak, black cherry, and American hornbeam.

The various shrubs that screen the median wall at the CIA Interchange were planted here since 1962 and create a very different impression than the one originally planned by the NPS, which featured small groupings of shade and understory trees separated by open grassy areas. As a result, the median shrubs do not contribute to the historic character of this section of GWMP – North.

In numerous places along the fringe of the CIA Interchange, the tree canopy has begun to encroach upon the overhead clearance of the roadway, restricting the view to areas outside of the immediate vicinity. However, some of the original vegetation patterns that existed at the CIA Interchange still exist. For example, the careful arrangement of shade and understory

trees of the inner cloverleaf lobe contrast somewhat with the vegetation elsewhere along the parkway corridor, and still include the original white pine and American holly. A cluster of shade trees including maple and oak still stands north of the overpass, in the space between the parkway's southbound lanes and the southbound exit, an area which remains devoid of evergreen trees. The generally lighter concentration of plantings combined with the close proximity of the adjoining hardwood and conifer forest also recalls the original plans, although certain areas marked in 1962 with pre-existing clusters of sumac and locust have since thinned. Finally, the vegetation along the north side of the interchange remains a relatively simple mix of trees and shrubs.

A single, large and quite prominent cottonwood tree (*Populus* sp.) stands on the southeast side of the interchange. This tree does not appear in the NPS planting plans and therefore may be a more recent addition to the landscape. However, since its advanced size suggests that it may have been present before 1963, further research is necessary to determine whether it contributes to the historic character of the parkway's cultural landscape. A picnic site developed by former property owner Joseph Leiter and built by the Civilian Conservation Corps (CCC) existed near the CIA Interchange before the parkway was built, and has probably resulted in the presence of more ornamental plantings here than would otherwise have been the case. However, further research on this site is necessary to determine the extent and composition of this vegetation.

As a result, the vegetation at the CIA Interchange retains a moderate level of integrity to the historic period of significance.

TURKEY RUN PARK INTERSECTION AREA PLANTINGS (STATION 401 TO 442)

Species identified by the 1962 Planting Plan (DSC TIC 850/80727) and still found at the Turkey Run Park Intersection include red maple, sugar maple, blue ash, northern red oak, scarlet oak, tupelo, shadblow serviceberry, flowering dogwood, eastern redbud, white pine, eastern redcedar, American holly, American witchhazel, northern spicebush, winged sumac, staghorn sumac, blackhaw, southern arrowwood, linden arrowwood, and mountain laurel. This mix of tree and shrub species in this area, which is consistent with the 1962 Planting Plan, contributes to the historic character of GWMP – North.

The only vegetation mentioned by the 1962 plans (DSC TIC 850/80727) that was either never planted or has since disappeared from this area is American hazelnut. Instead, several of the original vegetation patterns at the Turkey Run Park Intersection remain present today. For example, most of the Turkey Run Park Intersection is still characterized by the pre-existing hardwood and conifer forest with a border of 1962 plantings, both along the outer perimeter of the intersection and in the median. Likewise, a large number of towering shade trees continue to mark this area of the parkway, including maple and oak. As also indicated in the original designs, species on the north side of the intersection do not include shrubs, a distinction which has preserved the difference between this half and the interchange portion of the intersection to

the south. Various shade and evergreen trees still mark the median at the Turkey Run Park Intersection, including maple, oak, and white pine, and in some cases cluster around the natural rock outcroppings left undisturbed by the parkway's construction.

As a result, the vegetation at the Turkey Run Park Intersection today retains a high level of integrity to the historic period of significance.

TURKEY RUN PARK INTERSECTION TO CAPITAL BELTWAY (STATION 442 TO 506)

The section of parkway between Turkey Run Park Intersection and the Capital Beltway is bordered by upland forest community types generally containing mature, dominant overstory trees ranging from 100 to 230 years old. The rich blend of basic rocks in the underlying metasedimentary rocks of this area have fostered soils that support a particularly lush understory and a wealth of herbaceous vegetation. These include paw-paw (*Asimina triloba*), numerous spring ephemeral wildflowers, and the rare plant known as Eastern Buttercup *Phacelia* (*Phacelia covillei*).

As for the planned vegetation along this section, species identified by the 1962 Planting Plan (DSC TIC 850/80727) and still found here cover a broad range and include: red maple, sugar maple, northern red oak, scarlet oak, pin oak, white oak, black oak, eastern redbud, flowering dogwood, northern spicebush, blackhaw, linden arrowwood, mountain laurel, the non-native glossy buckthorn, shadblow serviceberry, white fringe tree, Washington hawthorn, American holly, redosier dogwood, silky dogwood, American witchhazel, mapleleaf viburnum, nannyberry, and red chokeberry. This combination of trees and shrubs in this area, which is consistent with the 1962 Planting Plan, contributes to the historic character of GWMP – North.

Vegetation mentioned by the 1962 plans that was either never planted or has since disappeared from this area includes American hazelnut. Still, mixed groupings of shade and understory trees in the median of this section of parkway preserves the original impression of a natural variety of woody vegetation separated by grassy openings. A number of flowering dogwoods and eastern redbuds still exist here and along the outer edges of the parkway.

Due to the addition of a median barrier wall at the Dead Run Bridge between 1995 and 1998, there are no longer any median plantings along this section of the roadway. In addition, this portion of GWMP – North is still not immune to some of the issues that exist along the rest of the parkway. This includes invasive and volunteer vegetation, which clogs the forest and older shade trees. Species such as princess tree, sumac, porcelainberry, English ivy, and poison ivy thus do not contribute to the historic character this cultural landscape.

Character-defining Features:

Feature: Mix of understory trees between Spout Run Parkway and Route 123 Interchange

Feature Identification Number: 137064

George Washington Memorial Parkway - North
George Washington Memorial Parkway

| | |
|--------------------------------|--|
| Type of Feature Contribution: | Contributing |
| Feature: | Wide median sections marked by small clusters of shade and understory trees and broad grassy mown areas |
| Feature Identification Number: | 137066 |
| Type of Feature Contribution: | Contributing |
| Feature: | Mix of shade, understory and evergreen trees with shrubs at Route 123 Interchange |
| Feature Identification Number: | 137068 |
| Type of Feature Contribution: | Contributing |
| Feature: | Clusters of evergreen, shade and understory trees in the cloverleaf lobes of Route 123 Interchange and CIA Interchange |
| Feature Identification Number: | 137070 |
| Type of Feature Contribution: | Contributing |
| Feature: | Presence of white pine and eastern redcedar in Route 123 and CIA Interchanges |
| Feature Identification Number: | 137072 |
| Type of Feature Contribution: | Contributing |
| Feature: | Contrast in vegetation between the inner lobes of Route 123 Interchange and the rest of the parkway |
| Feature Identification Number: | 137074 |
| Type of Feature Contribution: | Contributing |
| Feature: | Mix of shade, understory and evergreen trees with shrubs between Route 123 Interchange and CIA Interchange |
| Feature Identification Number: | 137076 |
| Type of Feature Contribution: | Contributing |
| Feature: | Clusters of shade and understory trees in the median between Route 123 Interchange and CIA Interchange |
| Feature Identification Number: | 137078 |
| Type of Feature Contribution: | Contributing |
| Feature: | Mix of shade, understory and evergreen trees with shrubs at CIA Interchange |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

Feature Identification Number: 137080
Type of Feature Contribution: Contributing
Feature: Mix of shade, understory and evergreen trees at Turkey Run Park Intersection
Feature Identification Number: 137082
Type of Feature Contribution: Contributing
Feature: Mix of shade and understory trees, shrubs and blue ash on the south side of Turkey Run Park Intersection
Feature Identification Number: 137084
Type of Feature Contribution: Contributing
Feature: White pine in the median along the south side of Turkey Run Park Intersection
Feature Identification Number: 137086
Type of Feature Contribution: Contributing
Feature: Clusters of existing woodland bordering the variable-width grassy shoulder of Route 123 Interchange, CIA Interchange, and Turkey Run Park Intersection
Feature Identification Number: 137088
Type of Feature Contribution: Contributing
Feature: Mix of shade and understory trees with American holly and shrubs between Turkey Run Park Intersection and Capital Beltway
Feature Identification Number: 137090
Type of Feature Contribution: Contributing
Feature: Historic hardwoods that act as marker trees or canopy for view corridors, including oak, hickory, maple, and beech
Feature Identification Number: 137092
Type of Feature Contribution: Contributing
Feature: Horse chestnut and magnolia at the Route 123 Interchange
Feature Identification Number: 137094
Type of Feature Contribution: Non Contributing
Feature: Mixed shrubs along the CIA Interchange median wall
Feature Identification Number: 137096

George Washington Memorial Parkway - North
George Washington Memorial Parkway

Type of Feature Contribution: Non Contributing

Feature: Volunteer and invasive vegetation throughout GWMP – North, including but not limited to princess tree, sumac, porcelainberry, English ivy, and poison ivy

Feature Identification Number: 137100

Type of Feature Contribution: Non Contributing

Feature: Open, grassy median along Dead Run Bridge

Feature Identification Number: 137102

Type of Feature Contribution: Non Contributing

Feature: Horse chestnut, American elm, and magnolia at the Route 123 Interchange

Feature Identification Number: 140398

Type of Feature Contribution: Undetermined

Feature: American elm, scarlet oak, tulip poplar, and white oak between the Route 123 and CIA Interchanges

Feature Identification Number: 140400

Type of Feature Contribution: Undetermined

Feature: Single, large cottonwood tree southeast of the CIA Interchange

Feature Identification Number: 140402

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:



Figure 8. Vegetation diagram comparing the 1959 Planting Plan with the 2009 existing conditions of the Route 123 Interchange.



Figure 9. The 123 Interchange looking east, traveling southbound and showing the west side of the cloverleaf (Greenhorne & O'Mara 2007).

Circulation

Historic Conditions

The corridor of GWMP – North was not necessarily chosen for its convenience to construction, but instead with a mind to maximize views to the Potomac River Gorge and Washington, DC, and more generally to preserve the remarkable scenery of the area. This section of the parkway features steep terrain and falling rock in the Spout Run vicinity, which made its construction particularly difficult. Additional challenges were posed by the state-of-the-art road construction technology being used to build the new roadway. For example, the Route 123 Overpass was the first pre-stressed concrete girder bridge constructed on the GWMP, as well as the region's first bridge of this kind. Other innovative designs were used in building the Route 123 Interchange, which was constructed in the 1950s and offered the advantage of a continuous flow of traffic. Continuous steel girder bridges were particularly fitting for the GWMP, as they allowed the parkway to match the curvilinear shape of the topography. Thus, throughout its planning and construction, advanced engineering was an ongoing theme in the design of circulation patterns for the parkway.

From the time of its construction, circulation on the north section of the GWMP was highly linear, with the main corridor running from the intersection with the Capital Beltway directly south to Spout Run Parkway. There were very few access points along this section of the roadway, and only two overlooks for visitors to appreciate available views. As the parkway extended north in the 1940s and 1950s, interchanges and intersections were installed to provide access to the Spout Run Parkway (1947-9), Route 123 (1957-8), the CIA Headquarters (1959) and finally the Capital Beltway (1962).

Following its completion in the late 1940s, the Spout Run Parkway served as the northern terminus of the GWMP and a link between the parkway and the surrounding roads of northern Virginia. In the late 1950s, it was realigned in order to allow the extension of the GWMP to Langley, Virginia (HAER VA-80 1994). As the new GWMP – North extended past this point, two new bridges were built over Spout Run that represent both the connection and the split that this new extension made with earlier sections of the parkway. While the stone-faced, rustic look of the Lower Level Spout Run Bridge resembled the bridges of the older, southern MVHM and south end of the GWMP, the fine, sleek lines of the Spout Run Arch Bridge broke with these earlier designs and paved the way for the bridges that followed along the new northern stretch of roadway.

In keeping with its historic recreational use, the north section of the GWMP has been associated with hiking trails since its construction. A 1939 map entitled "Trails of the Potomac Valley from Chain Bridge to Great Falls" illustrates portions of what would one day become the Potomac Heritage National Scenic Trail as it travels north along the banks of the Potomac River.

Existing Conditions

Circulation at GWMP – North can be divided into several different types, from high-traffic roads to foot trails. Each of these is considered individually, below.

MAIN CORRIDOR ROAD

The main corridor of GWMP – North extends directly from Spout Run Parkway to the Capital Beltway, and is the primary circulation feature of this cultural landscape (Figures 10, 11 and 12). Historically envisioned as a parkway linking Mount Vernon to Great Falls by running parallel to the Potomac River, the GWMP of today is slightly less than its historic ideal but retains much of the originally intended feel and character. However, in the process of its realization the roadway became not only a recreational drive, as planned, but a major commuter corridor. The speed limit currently posted for the GWMP is 50 mph, despite indications on the original 1950s design documents that a 45 mph design speed was used in consideration of the 40 mph posted speed limit expected at the time (EarthTech 2006). Since that time, cars have become substantially faster, drivers bolder, and automobile transport wildly popular. In 2006, the Average Daily Traffic (ADT) for the main corridor of GWMP – North ranged between 60,000 to 80,000 vehicles (EarthTech 2006).

Due in part to the heavy use of the roadway in the past few decades, it has undergone periodic repairs and select repaving in order to maintain a satisfactory driving surface. On average, minimal milling and repaving activities have taken place about once every ten to fifteen years, but a full-depth milling has never been conducted along the parkway. On the whole, despite these shifts in use and composition, the main corridor road follows the same path and alignment that it did during the period of significance, and therefore contributes to the historic character of the cultural landscape.

INTERCHANGES

Current interchanges along the north section of the GWMP include the Route 123 Interchange and the CIA Interchange. Both of these features have important historical value as not only essential circulation features, but key surviving elements of the original parkway. For a short period of time in the late 1950s and early 1960s, the CIA Interchange served as the northern terminus of the GWMP. With the passage of the Military Construction Authorization Act in 1955, the limited construction funding available for the GWMP was expanded to provide access to the new CIA Headquarters facility in Langley.

The Route 123 Interchange was constructed between 1957 and 1959 as a partial cloverleaf that enables both northbound and southbound GWMP traffic to access Route 123 (see Figure 11). It includes the first pre-stressed concrete girder bridge built on the GWMP, which was also reputedly the first in the Washington metropolitan region. To the north, Route 123 becomes the Chain Bridge Road, while to the south it is known as Dolly Madison Boulevard.

Today, motorists can access the CIA Interchange from both northbound and southbound lanes

(see Figure 10). Once off the GWMP, traffic is halted at a security check point. The ADT on the CIA interchange is approximately 10,900 (EarthTech 2006).

Just as they did during the historic period of significance, all of the interchanges along GWMP – North continue to link the parkway with local transportation networks. Over the years they have undergone only minimal repairs to driving surfaces, so as to ensure safe travel to visitors and commuters. They therefore retain a high level of integrity to the period of significance, and contribute to the historic character of the cultural landscape.

INTERSECTIONS AND ENTRANCES

The north section of the GWMP has five major intersections or points of entrance to local sites or roads: Spout Run Parkway, Fort Marcy, US Park Police D-2 Substation and GWMP Headquarters, Turkey Run Park, and the Capital Beltway/I-495.

The intersection with the Spout Run Parkway links the GWMP, by way of Lorcom Lane, to local roads in Virginia including State Route 124, US 29/Lee Highway, and Interstate 66 (see Figure 12). It thus serves a crucial role in connecting the parkway to a larger transportation network. At the Spout Run Parkway intersection of the GWMP in 2006, the ADT was about 66,800, while the Spout Run Parkway more generally had an ADT of 15,300 that year (EarthTech 2006).

Access to Fort Marcy, just east of the GWMP and south of the Route 123 Interchange, is available to northbound traffic only (see Figure 11). Built as part of the Civil War defenses of Washington, DC, Fort Marcy is accessible by way of a small drive, known as Fort Marcy Park Road, that leads to a parking lot. Visitors can leave the Fort Marcy area only by entering the northbound lanes of the GWMP. In 2006, the ADT on Fort Marcy Park Road was about 8,200.

The entrance and exit ramp to the US Park Police D-2 Substation provides access to the facility only from the northbound lanes of the GWMP. Visitors or employees entering or exiting the parking area from this point must then merge back onto the parkway, heading north. Coming from the southbound lanes, a small turn in the median marked with a stop sign provides access to the northbound lanes entrance to the facility (see Figure 10).

As the GWMP passes through Turkey Run Park, an exit leaves the southbound lanes, leading onto a winding route that circles back underneath the GWMP at Turkey Run Bridge to provide access to several parking and hiking areas on the north side of the GWMP, adjacent to the Potomac River (see Figure 10). Known as Turkey Run Road, the route from the parkway is narrow and circuitous, quickly giving travelers the impression of making an entrance into deep woods. Parking areas are partially screened by vegetation, and access to the northbound or southbound lanes of the parkway are provided via short ramps. Turkey Run Park is the one place on the north section of the GWMP that can be accessed by both northbound and

southbound traffic, and where visitors leaving the parking area can either head north on the GWMP or use the Turkey Run loop under the parkway to head south. The ADT for this section of the parkway is approximately 8,200, for the ramps at Turkey Run, and 8,200 on Turkey Run Road.

The intersection with the Capital Beltway/I-495 marks the northern terminus of GWMP – North, and represents the parkway’s link to one of the Washington metropolitan area’s busiest highways (see Figure 10). Aside from occasional paving repairs, today’s entrance and exit ramps to the beltway have not been altered since their installation in 1962.

With the exception of selective repaving and surface repairs, all five of the intersections and entrances along GWMP – North remain virtually unchanged from the way they were during the 1940s, 50s and early 1960s, and thus contribute to the historic character of the cultural landscape.

OVERLOOKS

There are two overlooks, or pull-offs, on the north section of the GWMP, located on either side of Donaldson Run and accessible only from the northbound lanes. The South Donaldson Scenic Overlook is located at Station 910-905 northbound, while the North Donaldson Scenic Overlook is located at Station 890-885 northbound (see Figure 11). Both sites allow northbound travelers to park their cars at advantageous spots along the roadway, get out and fully absorb the beautiful, sweeping views of the Potomac River Gorge, Georgetown, and Washington, DC. Access to these areas is not available to travelers in the southbound lanes of the GWMP, and upon leaving the overlooks, traffic must merge back into the parkway’s northbound lanes.

The scenic overlooks along GWMP – North are indicative of the original design intent of the parkway, which featured recreation and the ability of visitors to enjoy the beautiful scenery of the Potomac River Gorge. Each pull-off includes angular parking spaces and sidewalks located between the curbs at the edge of the parking area and the historic rustic stone masonry guardwalls framing the views beyond. Due to the fact that the North Donaldson Scenic Overlook may have been built sometime in the 1960s, after its counterpart to the south, its contribution to the historic character of the cultural landscape is undetermined and additional research is needed. However, the distinctive style and overall function of this overlook are still compatible with the historic character of the parkway. As for the South Donaldson Scenic Overlook, it remains as it was at the time of its construction in the late 1950s, and therefore contributes to the historic character of the north section of the GWMP.

TRAILS

The Potomac Heritage National Scenic Trail is a partnership begun in 1974 to develop a network of locally-managed trails within a 425-mile corridor between the Chesapeake Bay and the Allegheny Highlands. As of spring 2007, 16 trails had been recognized as segments of this

trail, which runs parallel to the north section of the GWMP, and along the western bank of the Potomac River (see Figure 10). Just as the MVMH differs in character from the north section of the GWMP, the Potomac Heritage Trail is different from the multi-use Mount Vernon Trail. As a rugged hiking trail that traverses some exceedingly steep terrain, the Potomac Heritage National Scenic Trail is not accessible to some age groups and less experienced hikers. This trail is connected to the rest of Turkey Run Park and the nearby communities by a network of other smaller trails leading into and around the parkway.

In perpetuating the parkway's recreational use and as a continuation of historic trails that existed in this area in 1939, the Potomac Heritage National Scenic Trail and the trails associated with Turkey Run Park are both compatible with the historic character of GWMP – North. However, additional research on the history of these trails is necessary in order to determine whether they contribute to the historic character of this cultural landscape.

EMERGENCY ACCESS POINTS

Throughout the GWMP, there are few opportunities to cross between northbound and southbound lanes in the case of an emergency, and in the north section there is only one. When traveling southbound, motorists can turn left for direct access to the US Park Police D-2 Substation, in between the Capital Beltway intersection and the CIA Interchange. There are no opportunities for the public to legally cross over the median in this section of the parkway. A single cross-over point is located just south of the intersection with the Capital Beltway/Interstate 495, and used exclusively for emergency vehicles and park maintenance. These emergency access points were installed at the same time the parkway was built, and contribute to the historic character of the cultural landscape.

Character-defining Features:

| | |
|--------------------------------|-------------------------------------|
| Feature: | Main corridor roadway |
| Feature Identification Number: | 136894 |
| Type of Feature Contribution: | Contributing |
| Feature: | Intersection with Spout Run Parkway |
| Feature Identification Number: | 136896 |
| Type of Feature Contribution: | Contributing |
| Feature: | Route 123 Interchange |
| Feature Identification Number: | 136898 |
| Type of Feature Contribution: | Contributing |
| Feature: | Access to Fort Marcy |
| Feature Identification Number: | 136900 |

George Washington Memorial Parkway - North
George Washington Memorial Parkway

| | |
|--------------------------------|--|
| Type of Feature Contribution: | Contributing |
| Feature: | CIA Interchange |
| Feature Identification Number: | 136902 |
| Type of Feature Contribution: | Contributing |
| Feature: | Turkey Run Park Intersection |
| Feature Identification Number: | 136904 |
| Type of Feature Contribution: | Contributing |
| Feature: | Direct southbound access to US Park Police D-2 Substation and Parkway Headquarters |
| Feature Identification Number: | 136906 |
| Type of Feature Contribution: | Contributing |
| Feature: | Intersection with Capital Beltway/I-495 |
| Feature Identification Number: | 136908 |
| Type of Feature Contribution: | Contributing |
| Feature: | South Donaldson Scenic Overlook |
| Feature Identification Number: | 136910 |
| Type of Feature Contribution: | Contributing |
| Feature: | Emergency cross-over south of the Capital Beltway/I-495 |
| Feature Identification Number: | 136912 |
| Type of Feature Contribution: | Contributing |
| Feature: | Trails belonging to the Potomac Heritage National Scenic Trail |
| Feature Identification Number: | 136926 |
| Type of Feature Contribution: | Undetermined |
| Feature: | Turkey Run Park trails |
| Feature Identification Number: | 136930 |
| Type of Feature Contribution: | Undetermined |
| Feature: | North Donaldson Scenic Overlook |
| Feature Identification Number: | 136932 |

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

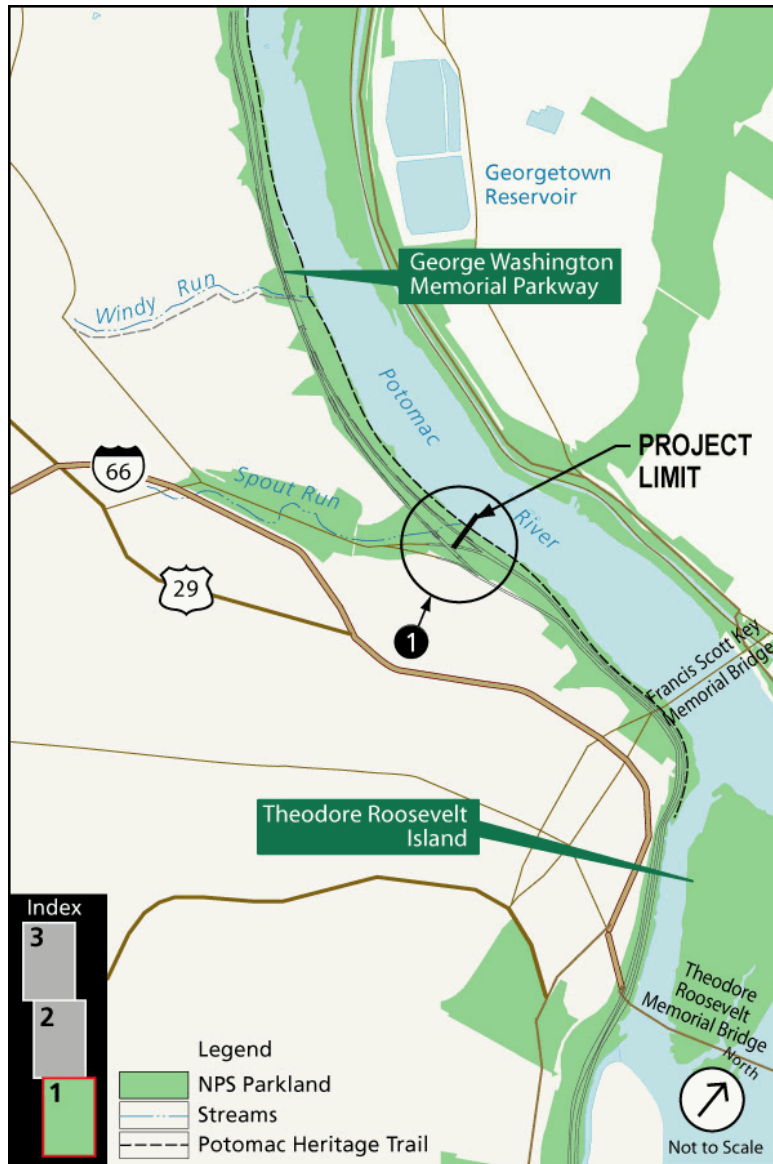


Figure 10. Map of the southern section of GWMP – North and the intersection with Spout Run Parkway (1).

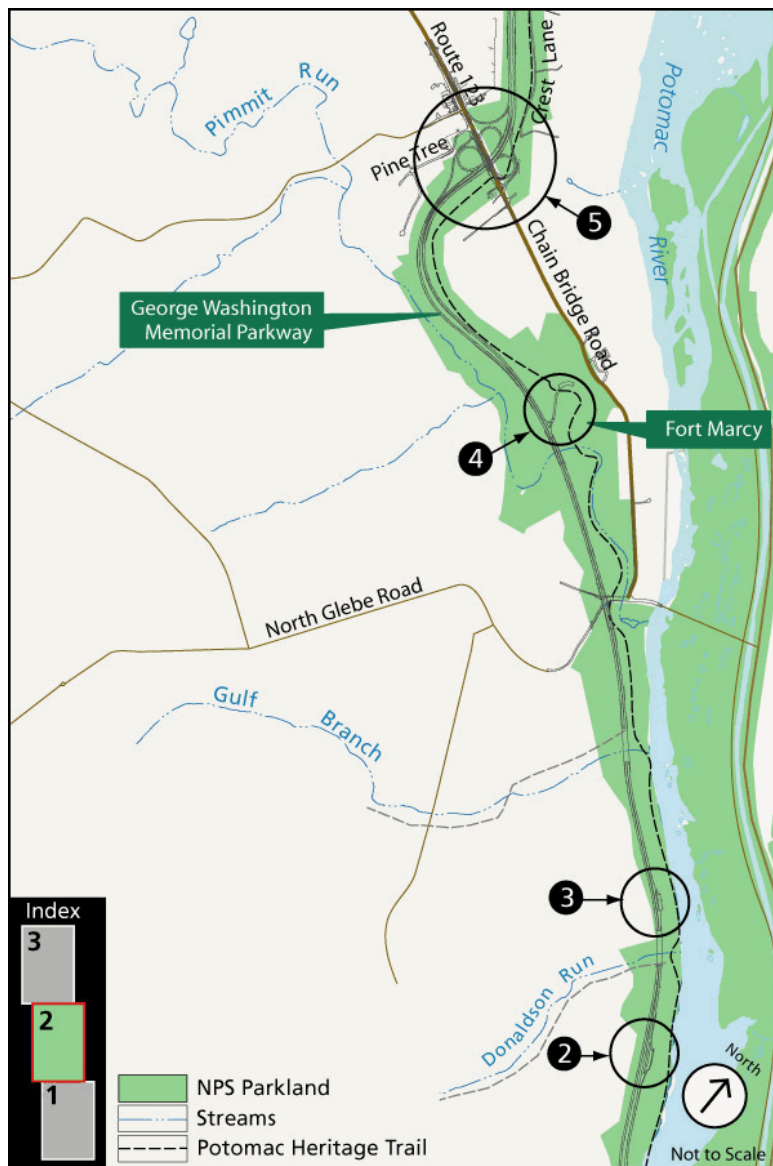


Figure 11. Map of the southern circulation features as continued from Figure 10, including: (2) South Donaldson Scenic Overlook; (3) North Donaldson Scenic Overlook; (4) Entrance/Exit to Fort Marcy; and (5) Route 123 Interchange.

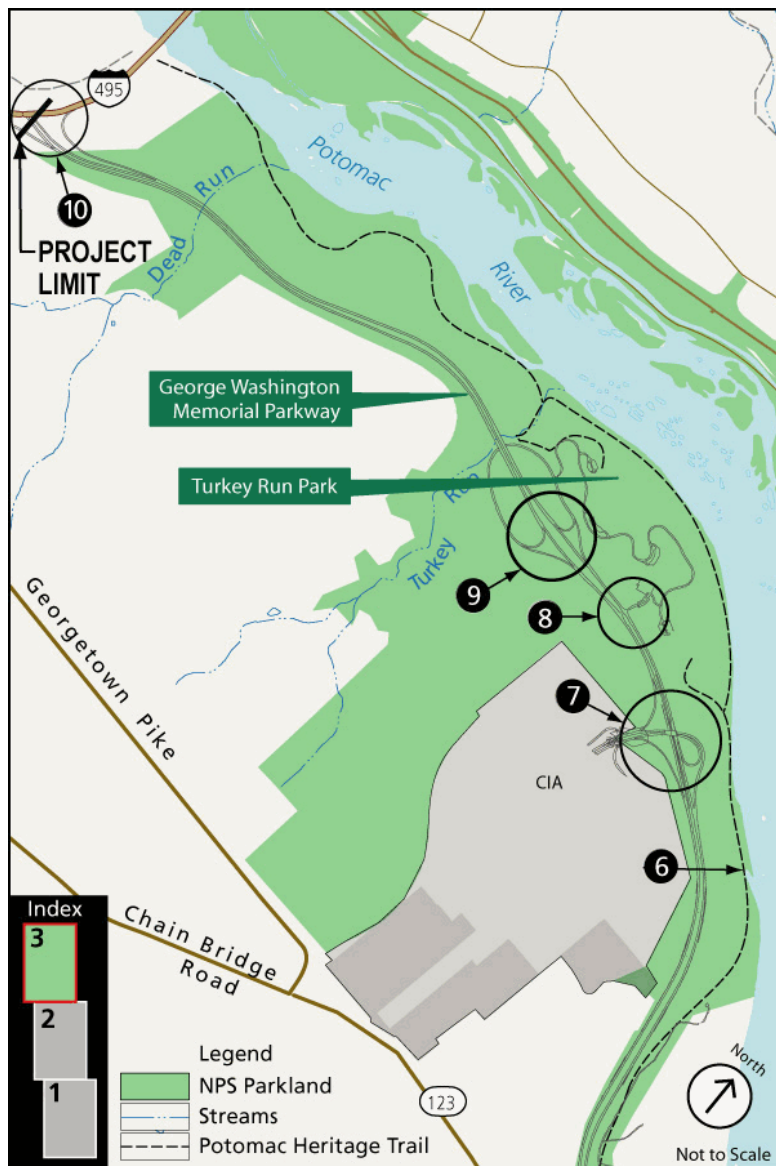


Figure 12. Map of the northern circulation features, including: (6) Potomac Heritage National Scenic Trail; (7) CIA Interchange; (8) USPP Substation and Parkway Headquarters Entrance; (9) Entrance/Exit to Turkey Run Park; and (10) GWMP/I-495 Interchange.

Buildings and Structures

Historic Conditions

BRIDGES

All eleven bridges along the north section of the GWMP were constructed during the historic period of significance, from 1930 to 1963 (Figures 13, 14 and 15). The engineering of many of these bridges was innovative for the times, and contributed heavily to the overall character of

the roadway by providing a smooth, continuous curvature throughout. With some of the most rugged terrain in the region, this north section of the Potomac Palisades had previously remained undeveloped due to the difficulty of traversing the frequent deep cuts created by the various runs, or streams, leading down to the river. Finding a way to transport cranes and other construction equipment out to the necessary sites for bridge construction was in itself an engineering challenge (HAER VA-76 1994).

Southern Bridges

The Lower Level Spout Run Bridge was designed by engineers from the Bureau of Public Roads and the National Park Service in 1956, and built between 1957 and 1958. This reinforced concrete rigid frame arch bridge represents the initial push to extend the parkway north to the planned CIA Headquarters in Langley, Virginia. It is also one of the later instances of the heavier, rustic style of construction being used along the GWMP, resembling its 1930s MVMH predecessors more than its structurally exposed, minimalist late-1950s successors. Designed by engineers from the Bureau of Public Roads and National Park Service architects in 1956, its skewed frame style adhered to a simplified methodology that was developed by 1950. This special design “allowed highway designers greater ability to maintain roadway curvature across bridge structures,” an increasingly crucial capability for the parkway as it extended north (HAER VA-80 1994: 2). In a unique alteration specific to the parkway, the innovations of the Lower Level Spout Run Bridge were offset by a facing of native stone which gave it the same appearance as the earlier MVMH bridges designed by Gilmore Clarke. It was also built with stone parapets and sidewalks on either side. The first of the two bridges completed in the vicinity of the intersection between the GWMP and Spout Run Parkway, it carried northbound parkway traffic over Spout Run (HAER VA-80 1994: 2).

The Spout Run Arch Bridge (also known as the High Level Spout Run Bridge) was constructed between 1958 and 1959 to carry southbound GWMP traffic over Spout Run and the northbound exit to the Spout Run Parkway. Drawn up jointly by the Bureau of Public Roads and the National Park Service, its designs were approved by the Commission of Fine Arts in 1957. The final product included both stone masonry wing walls with granite facing and a set of aluminum parapet railings. Similar to the European bridges designed by Robert Maillart in the 1930s, this structure is a distinctive open spandrel concrete arch bridge whose dramatic design broke for the first time with the more rustic aesthetic used by Gilmore Clark on earlier bridges of the GWMP. In the diversity of their style, the bridges around Spout Run Parkway serve as a visual link between the more rustic design of the MVHM, to the south, and the distinctive 1950s aesthetic shared by the bridges of GWMP – North (LCS NPS 2008).

Further north, the Windy Run Bridge was completed in 1959. Its classic, late 1950s design presented a lighter, cleaner silhouette and lines than those of the earlier bridges. This general concept, originally known as the “Steel and Concrete Bridge,” began in 1950 as a design of National Park Service architect William Haussman, whose name appears on the architectural drawings for GWMP bridges from the 1940s through the 1960s. These drawings were later developed into bridge engineering plans by the Bureau of Public Roads in 1957 (LCS NPS

2008). Built under a contract that also included the Gulf Branch and Donaldson Run Bridges, both of similar design, this bridge exhibited a style distinct from any of the earlier GWMP or MVMH structures. Whereas earlier bridges had used native stone facing on modern reinforced concrete girder or rigid frames in order to blend with the surrounding wilderness environment, the Windy Run Bridge and its contemporaries were built of exposed steel and concrete that showcased the light, clean lines typical of late 1950s bridges. In this way, the bridges of GWMP – North once again illustrated the changing times in their design development along the length of the roadway.

Central Bridges

Both the Donaldson Run Bridge and the Gulf Branch Bridge, two continuous steel girder bridges, were built between 1958 and 1959. Following a similar style to the Windy Run Bridge, these bridges exemplify the transition from the rustic, bolder lines of the earlier GWMP bridges to a more graceful design typical of the 1950s. These structures did not employ the native stone facing used by their rigid frame reinforced concrete predecessors. Instead, they stood out from the woody surroundings with their stark, exposed steel girders and concrete piers, thus reflecting the post-Korean war shift toward more economic engineering decisions that showcased underlying physical construction. At the same time, their light, graceful silhouette and clean late-1950s lines illustrate a certain functional design driven by the unique and difficult terrain on which they were built. Thanks to their high steel plate girder form, they were able to span the deep ravines formed by Donaldson Run and Gulf Run. Both bridges were based on the design used for the Windy Run Bridge that had been drawn up by William Haussman in 1950 as plans for a “Steel and Concrete Bridge” (LCS NPS 2008). In 1957, these drawings were refined into engineering plans for the two structures by the Bureau of Public Roads, and both were built under a combined contract with the Windy Run Bridge. Due to the steep, unstable mica schist that they were built upon, the abutments for these bridges were provided with extra support by stepped or counterfort footings. Both structures were originally built with sidewalks as well as cast and welded steel guardrails that were designed to optimize views of the steep Potomac Gorge below. The Donaldson Run Bridge included exposed concrete piers and abutments and exposed steel plate girders. In a small acknowledgment of the style used in earlier bridges along the parkway, the approach to the Gulf Run Bridge was outfitted with original stone-faced concrete core guardwalls. Still, the irregular, rough nature of this facing and the lack of granite coping stones is less refined than what is found in the earlier bridges along the parkway.

Around the same time two more bridges of similar design were constructed, continuing north: the Glebe Road Bridge, designed by the Bureau of Public Roads in 1956 and built in 1959, and the Pimmit Run Bridge, designed beginning in 1955 and built in 1959. Once again unlike their predecessors, these bridges featured clean, graceful lines of exposed concrete and steel rather than masking these structural elements behind a facing of native stone. Both were lined with aluminum posts and railings, and served to span the deep ravines of the Potomac Palisades as the parkway extended north. Constructed under a combined contract, both the Glebe Road and Pimmit Run Bridges were built with cantilevered “T”-shaped piers and relied entirely upon

structural details for ornamentation. Due to the steep, rugged terrain and unstable mica schist on which they stand, the abutments of these structures were outfitted with deep counterfort footings over leveling courses. The reinforced concrete wing walls were also constructed on counterfort footings, while the concrete piers rest on spread footings. Although the use of stone-faced concrete wing walls in some way acknowledged the earlier stone masonry walls along the parkway, their irregular layout and lack of granite coping lacks the more refined rusticity of the earlier walls (HAER VA-75 1994). Excavation for construction of the Glebe Road Bridge was carried out entirely with drills and hand labor, since the location of a watermain parallel to Glebe Road prevented the more standard use of blasting (LCS NPS 2008).

The Route 123 Overpass was constructed during the same era as its neighboring bridges to the south, between 1957 and 1959. Built to carry traffic from busy Virginia Route 123 over the GWMP, it was constructed with a tight cloverleaf that transferred traffic between the two roadways. Route 123 was, and still is, an important link to local roads, connecting the Chain Bridge with McLean, Tyson's Corner, and Vienna, Virginia as well as points further south. This bridge is particularly remarkable for its construction type. It was not only the first pre-stressed concrete girder bridge to be built on the GWMP, but probably the first bridge of this kind to be built in the Washington metropolitan area. Encouraged by the substantial rise in steel prices during the 1950s, the Bureau of Public Roads and the National Park Service decided on the prestressed concrete girder bridge, a technology that had evolved in the 1930s but until this point had not been extensively utilized. This new type of construction used half the steel required by traditional reinforced concrete structures, and by 1959 state transportation agencies had fully embraced its use in their designs for bridge construction. The Route 123 Overpass originally had aluminum guardrails and approach guardwalls that used mica schist, granite copings, and stone from the Stoneyhurst Quarries of Cabin John, Maryland.

Northern Bridges

Built with the same post and girder forms used in the Route 123 Overpass to the south, the CIA Overpass was constructed in 1959 as a pre-stressed concrete girder bridge. Measuring 112 feet long, the bridge has sidewalks on either side and is skewed with piers and abutments that parallel the parkway. Its original guardrail was aluminum, while the wing walls were stoned-faced with native stone and granite copings (HAER VA-72 1994: 2).

The Turkey Run and Dead Run Bridges are both continuous steel girder bridges constructed as part of a joint project. The Turkey Run Bridge was completed between 1960 and 1961, while the Dead Run Bridge was completed in 1963 (HAER VA-71 1994; HAER VA-70 1994). Both structures featured a pair of twin bridges with shared abutments. Their clean, light silhouettes are once again typical of the style popular in the late 1950s, and together they represent the final transition of GWMP – North from the rustic look of earlier bridges to a later design that was the product of stylistic, economic and technological change over time. As described in the Historic American Engineering Record (HAER): “A combination of factors including advances in engineering, changing aesthetic ideals and difficult site conditions contributed to the shift in

design aesthetic of parkway bridge structures” (HAER VA-71 1994: 2). The Dead Run and Turkey Run Bridges are two final examples of the more functionally-derived later bridges, whose ornamentation relied entirely upon exposed structural details. Their concrete wing walls were “left exposed and detailed with v-shaped grooves and textured, board-formed surfaces. The riveted connections of the steel plate girders” also created an interesting, more modern visual design (HAER VA-71 1994: 2). The exposed steel of both bridges were painted in the NPS-specified “foliage green,” the same color used for most of the other bridges along the north section of the GWMP, and both were outfitted with black, seamless square-cut steel tube parapet rails. Very similar in appearance to the Dead Run Bridge, the Turkey Run Bridge was built with a slight spiral curve to its deck.

HISTORIC STONE MASONRY GUARDWALLS

Over the course of constructing GWMP – North, a series of historic stone masonry guardwalls were installed along the length of the parkway. These walls lacked capstones and were similar to those being built by the Bureau of Public Roads, following the National Park Service design for locally-quarried stone guardwalls that was also used on the Blue Ridge Parkway in Virginia. At the time of their construction in the 1950s and 1960s, they served both an aesthetic and a safety feature. Their rustic appearance was important to the overall experience of driving the parkway, and in particular the impression of winding along a scenic country road curving through the same woodland environment that had existed historically. In keeping with this concept, these structures varied in length, height, color, shape and size of stones, and face depth. They also served an important function in framing views along the parkway corridor. Although built in two separate phases, from Spout Run to the CIA Headquarters in the late 1950s and then onward from there to the Capital Beltway in the early 1960s, these features present an overall uniform rustic appearance along the length of the parkway that is crucial to its historic character.

Existing Conditions

BRIDGES

Southern Bridges

The two GWMP bridges around the Spout Run Parkway intersection are located in the vicinity of NB Sta. 1000-995 and SB Sta. 490-500. The reinforced concrete rigid frame construction of the Lower Level Spout Run Bridge, faced in native stone, has a length of 20 feet and spans Spout Run in a single arch (Figure 16a). Its 40-degree skew to the parkway allows it to follow the natural curvature of the adjacent Potomac River edge. It stands directly downstream of the Spout Run Arch Bridge and carries two lanes of northbound GWMP traffic between a set of stone parapet walls. Its reinforced concrete footings rest on solid rock, and the abutments and wing walls are reinforced concrete with native stone facing. Both the parapet coping and the arch ringstones are black and white dimensional granite, and the stone facing is anchored to the wing walls and abutments with steel anchor bars. The bridge’s stone masonry facing recalls

the bulkier aesthetic of the earlier bridges of the MVMH to the south, and represents a rustic contrast to the more modern, 1950s styling of the nearby Spout Run Arch Bridge. Since the historic period of significance the bridge has been widened and the original sidewalks eliminated, a project which likely took place around 1991 when the same work was conducted along the neighboring Spout Run Arch Bridge (HAER VA-80 1994: 2; HAER VA-79 1994: 2-3). As a result, the Lower Level Spout Run Bridge retains a moderate level of integrity, and contributes to the historic character of the cultural landscape. During a 1994 parkway rehabilitation project, the stone parapet walls of the Lower Level Spout Run Bridge were reconstructed and extended using mica schist. This also included the placement of new riprap to counteract scour at the wing walls, which were extended as well. Today, a clear seam between the old and new sections of the bridge is evident, on the approach to the structure from either side.

A small footbridge for the Potomac Heritage National Scenic Trail carries pedestrian traffic across Spout Run just below and downstream of the Lower Level Spout Run Bridge (see Figure 16a). It is constructed of steel and wood, and was probably built sometime around 1974. The footbridge is compatible with the historic character of the cultural landscape, although it does not contribute to that character.

The Spout Run Arch Bridge, or High Level Spout Run Bridge, is a reinforced concrete rib arch bridge that has been called “undisputedly one of the Capital’s most dramatic constructions” (HAER VA-79 1994: 2). As drivers head north on the parkway, this bridge is the first to break with the rustic aesthetic used by Gilmore Clark on the earlier GWMP bridges. It features a pair of slender, parallel exposed concrete open spandrel arches that are only four feet, ten inches thick at the center, and each of which is supported by reinforced concrete abutments and beams. Measuring a total of 335 feet long including wing walls, this bridge is supported by eight ribs rising out of the single, parabolic arch, which measures over 84 feet high at its center (HAER VA-79 1994: 2). The contractor used blasting to excavate for the foundations, which stand on solid rock and have spread footings. The footings for the wing walls are stepped, while two reinforced concrete box beam arch ribs rise from their footings to form a parabolic curve. The wing walls themselves have been replaced by concrete core masonry walls with stone facing and granite copings that taper away from the roadway on either side. The only alterations to the structure since the period of significance were made during the widening of the roadway in 1991, which resulted in the reduction of bridge sidewalks to a width of 2 feet, 3 inches to accommodate the new roadway (HAER VA-79 1994: 2-3). At this time the bridge was also redecked (LCS NPS 2008). The Spout Run Arch Bridge retains a moderate level of integrity, and contributes to the historic character of the parkway.

The Windy Run Bridge (located at NB Sta. 965-955 and SB Sta. 455-465) is a four-span exposed steel plate girder bridge, supported by concrete piers and abutments that reflect the graceful, minimalist aesthetics of the late 1950s. Bridging one of the deeper ravines of the Potomac Palisades, it carries four lanes of traffic and has a total length is 456 feet, including two central spans and two approach spans. The deck is cast-in-place concrete set inside steel

plate girders, while the parapet consists of the original aluminum bridge railings. Drainage troughs were installed in front of the bridge abutments in 1961, and the structure underwent a rehabilitation project between 1999 and 2002. This project included the treatment of rust on the structural steel of the bridge, repairs to erosion at the piers, cleaning and sealing of the concrete abutments and wing walls, the addition of safety extensions to the wing walls, and the repainting of the entire structure in new beige and brown colors (LCS NPS 2008). Since then, a concrete core access denial barrier, or Jersey barrier, has been added for safety reasons. Today, the bridge still retains its original minimalist ornamentation and features the original 1959 aluminum guardrails and cantilevered “T”-shaped piers (HAER VA-78 1994: 2). Consequently, the Windy Run Bridge retains a high level of integrity, and contributes to the historic character of the parkway.

Central Bridges

The Donaldson Run Bridge (located at NB Sta. NB 900-890 and SB Sta. 390-400) is a 499-foot, three-span steel plate girder bridge supported by concrete piers and abutments that exhibit lighter, cleaner lines than earlier bridges along the parkway. Similar to its contemporaries, the Windy Run and Gulf Run Bridges, the Donaldson Run Bridge features the simple, exposed design that became popular in the late 1950s. The horizontal curvature of its deck allows for the continuous curvature of the roadway, furthering the ideal of minimal visual interruption to both roadway and surrounding landscape. Between 1999 and 2002 the bridge was rehabilitated, including repairs to cracking pier filling and abutment breastwalls and the treatment of minor rust spots on the structural steel. The only alteration to this structure since the period of significance has been the removal of the original sidewalks in order to widen the area available to motorists, and the addition of a Jersey barrier for safety purposes between 1997 and 1998 (HAER VA-77 1994: 2). The Donaldson Run Bridge therefore retains a moderate level of integrity and contributes to the historic character of the cultural landscape.

The Gulf Branch Bridge (located at NB Sta. NB 870-865 and SB Sta. 365-370) is a 492-foot, continuous three-span steel plate girder structure resting on concrete piers and abutments that reflect the more graceful aesthetic of the late 1950s. To help compensate for the steep grade of the deep ravine and unstable mica schist on which it rests, its concrete abutments rest on spread footings. The stone-faced guardwalls used in its approaches allow it to blend somewhat with the more rustic charm of the earlier GWMP and MVMH bridges, even as it exhibits the more exposed style of the later bridges found along GWMP – North. Between 1998 and 1999, a Jersey barrier was installed along the bridge for safety reasons. A rehabilitation took place beginning in 1999, including the replacement of the deck and repairs to cracks in the structure. It was also repainted in 2003-2004, but has not undergone any major alterations since its construction (NCR Transportation Planning Board 2005: 33). The sidewalks as well as the original cast and welded steel guardrails and posts, designed to afford motorists the greatest possible views of the surrounding landscape from the parkway, are still present (HAER VA-76 1994: 3). As a result, the Gulf Branch Bridge retains a high level of integrity, and contributes to the historic character of the parkway.

Spanning Glebe Road and an unnamed tributary of Pimmit Run, the Glebe Road Bridge (located at NB Sta. 855-845 and SB Sta. 345-355) is a four-span, continuous steel plate girder bridge supported by concrete piers and abutments. Providing views of Potomac River Gorge and the Chain Bridge, the structure curves and slopes so as to preserve the natural curvature of the surrounding landscape, actually rising an elevation of twenty feet from east to west. The approaches to this 607-foot bridge feature a set of stone-faced guardwalls that offer some continuity with both the older and newer sections of the parkway. Since 1963 the bridge has undergone a “reconstruction by the NPS in 1982,” which included the replacement of the original aluminum railings of the parapet with steel ones, the replacement of the deck, and the elimination of its sidewalks (HAER VA-75 1994: 2-3). A Jersey barrier was added between 1998 and 1999, and new deck drains were installed during the parkway rehabilitation of 1999 through 2002 (LCS NPS 2008). It was also painted and cleaned in 2003-2004 (NCR Transportation Planning Board 2005: 33). The Glebe Road Bridge therefore retains a moderate level of integrity, and contributes to the historic character of the cultural landscape.

The Pimmit Run Bridge (located at NB Sta. 835-825 NB and SB Sta. 325-335) has a similar design to that of the Glebe Road Bridge, with a light, clean 1950s-style silhouette, aluminum guardrails, cantilevered “T”-shaped piers, and a reliance on structural details for ornamentation. The original rustic, stone masonry guardwalls leading up to the 424-foot bridge from both sides have been replaced with concrete core stone faced masonry guardwalls since 1963, and a median wall of the same type has been installed. Other changes made to this structure since the period of significance include the addition of concrete core stone faced masonry parapet walls beneath the historic aluminum guardrails in 1972, the installation of a new concrete deck slab in the 1990s, and the repair of footing erosion in 2003-2004 (HAER VA-74 1994: 2; NCR Transportation Planning Board 2005: 33; LCS NPS 2008). The Pimmit Run Bridge therefore retains a high level of integrity, and contributes to the historic character of the parkway.

The Route 123 Overpass (also known as the Route 123 Underpass, and located at NB Sta. 785-780 SB Sta. 280-285) is a three-span, pre-stressed concrete girder bridge that rests on concrete piers and abutments and carries four lanes of Virginia Route 123 over the GWMP. It represents the first bridge of this type to be built on the GWMP and possibly in the greater Washington metropolitan area. The 169-foot structure is marked by unadorned, exposed concrete faces, while the original approach guardwalls are mica schist with granite coping. It stands at the center of a four-ramp parclo, or folded diamond partial cloverleaf interchange, and is built at a 22-degree skew with piers and abutments that run parallel to the parkway. The bridge’s original aluminum rails were removed in 1972 and replaced with a concrete parapet. The bridge itself was reconstructed in 1985 and rehabilitated between 2003 and 2008, when the spalling and delamination of the beams and pier caps was addressed (HAER VA-73 1994: 2; NCR Transportation Planning Board 2005: 33). As a result, this structure retains a moderate level of integrity, but still contributes to the historic character of the cultural landscape.

Northern Bridges

To the north of the Route 123 Overpass is the CIA Overpass, a pre-stressed concrete girder

bridge resting on concrete piers and abutments. Post and girders were cast in-place, from the same forms used for the Route 123 Overpass. Changes made to the bridge since 1963 include a deck replacement in 1982-83. The original aluminum guardrails of the bridge were also “re-set” sometime before 1994 (HAER VA-72 1994: 2). As a result, the CIA Overpass retains a moderate level of integrity, and contributes to the historic character of the cultural landscape.

Spanning Turkey Run and an access road to Turkey Run Park, the Turkey Run Bridge (located at NB Sta. 665-655 and SB Sta. 165-155) is a 484-foot, four-span continuous steel girder bridge that carries both north- and southbound traffic and rests upon concrete, cantilevered and reinforced “T”-shaped piers and concrete abutments. Like most of the other late-1950s bridges of GWMP – North, it was designed to reflect the aesthetics of the period, and exhibits a fine, clean silhouette and lines. As one of the later bridges of the parkway, it is also perhaps more functional in its design than some of its predecessors. For example, its parapet rails are seamless, square-cut steel tubes that further reflect the 1950s design aesthetic rather than that of earlier railings. Post-1963 alterations to the Turkey Run Bridge include repairs to the bridge deck and the installation of a cathodic protection system, which utilizes a mixture of coke breeze and asphalt cement to create a low voltage current flow to counteract structural corrosion, in 1976 (HAER VA-71 1994: 3). This employment of a cathodic protection system was advanced for the day, and marks an early instance of its use in architectural construction. Between 1995 and 1998, the bridge deck was replaced. At the same time, a median barrier and wing walls of concrete core construction with stone facing were installed for safety purposes. The ends of the wing walls taper away from the roadway, while the median guardwalls on either side of the bridge are buried in earthen berms. The structure also underwent some minimal rehabilitation around 2002, when the rest of the parkway was being rehabilitated (LCS NPS 2008). The Turkey Run Bridge therefore retains a moderate level of integrity, and contributes to the historic character of the parkway.

The Dead Run Bridge (located at NB Sta. 615-610 and SB Sta. 110-115) consists of a pair of twin bridges that share abutments, an engineering feature that was incorporated specifically to minimize disturbance to the natural environment. Each twin structure is a three-span continuous steel girder bridge supported by concrete piers and abutments, designed to reflect the airy, graceful aesthetics of the period. Like other bridges along GWMP – North, the 368-foot Dead Run Bridge features a horizontal curvature and sloping deck that allows the roadway to maintain a continuous curve, a touch that helps to minimize visual interruptions to the roadway and surrounding landscape. Its deck is paved with bituminous asphalt, its girders are painted in the original NPS “forest green” shade, and the parapets feature the original seamless, square-cut steel tube railings. Alterations to the bridge since the period of significance include the replacement of the bridge deck in 1974, the installation of a cathodic protection system to prevent corrosion in 1976, and the installation of a new deck, wing walls and median barrier between 1995 and 1998. Approaches to the bridge are now bordered by concrete core stone faced masonry guardwalls and median walls that are similar to those at Turkey Run Bridge (HAER VA-70 1994: 3; LCS NPS 2008). More recently the structure underwent a rehabilitation in 2002, when the rest of the parkway was being rehabilitated (LCS

NPS 2008). Consequently, the Dead Run Bridge retains a high level of integrity, and contributes to the historic character of GWMP – North.

BUILDINGS

Due to their post-1963 construction dates, none of the buildings found at GWMP – North contribute to the historic character of the cultural landscape. This includes three main buildings: the US Park Police D-2 Substation and the two Parkway Headquarters buildings located in Turkey Run Park.

HISTORIC STONE MASONRY GUARDWALLS

The historic stone masonry guardwalls found along the north section of the GWMP are one of the most important and character-defining features of this cultural landscape, and therefore contribute to the historic character of the parkway. To the casual motorist driving along the roadway, these walls may not stand out or even necessarily catch the eye. However, the very fact that they are so inconspicuous reflects their integral role in the cultural landscape. The walls serve not only as essential architectural features, emphasizing the rolling and curving topography, but some serve to artfully frame each of the parkway's views to the Potomac River Gorge, Georgetown, and Washington, DC. Varied in length and height but uniform in style, they also provide a continuous thread along the full extent of this section of parkway (Figures 17, 18, and 19).

Reflecting the rough, natural surroundings, the rustic appearance of the historic masonry walls is characterized by a range of local stone colors from browns and tans to blue hues, the variable depth and width of mortar joints, and the relationship of large stones to smaller stones (Figures 20a and 20b; see Figure 3). These details create the appearance of a varied country wall whose surface is continuously mottled by light and shadow, similar to the woods through which the parkway passes. Huge boulders placed at regular points in these walls reach across their entire depth, and run roughly four feet long. In an innovative design that perhaps reflects the budget or time constraints of the 1940s and 50s, the stones of the outer wall faces are rough and uncut, forming a jagged line that fronts the woods on either side of the parkway. As for the road-side faces and tops of the walls, the more consistent plane that they present is still somewhat variable due to the changing depths of stones, their various rough surfaces, and the range of shadows created by the varied depth and width of the mortar joints.

The length of the fifty-five historic stone masonry guardwalls along GWMP – North ranges from 40 to 1,740 feet. Their height averages from 18 to 22 inches, with some measuring as little as 12 and others as much as 27 inches tall. Their distance from the curb or the edge of the roadway varies depending on location, but averages between two and three feet. Additional information on the specific location of these walls can be found in the Supplemental Information Chapter, Appendix B. For purposes of clarity and consistency, numbers have been assigned to each guardwall, with southbound walls labeled with an “S,” northbound walls with

an “N,” and median walls with an “M.” One exception to this rule is Southbound Wall 29S, a long historic stone masonry wall that appears in the median and marks a grade separation between the north- and southbound lanes to the north of Spout Run.

This inventory documented a single wall along GWMP – North that contributes to the historic character of the parkway but had previously been un-numbered. This median wall stands south of the Route 123 Interchange, opposite Northbound Wall 20N and immediately north of Southbound Wall 13S (see Figure 18).

In some areas the grass shoulder between the parkway and these guardwalls, which varies from three to six feet or more, further helps to frame and lengthen the views. Thus, just as the vegetation and grade of the parkway has been manipulated to structure views and direct the traveler’s attention, so the guardwalls help guide the eye along the parkway’s curvilinear alignment and provide a border for the vistas beyond.

Nearly all of the surviving historic stone masonry guardwalls retain some measure of integrity, and contribute to the historic character of the cultural landscape with the exception of the four indicated as non-contributing guardwalls.

SAFETY-RELATED STRUCTURES

A number of safety-related structures have been added to the north section of the GWMP over the past few decades. Due to their more recent construction, none of these safety-related structures contribute to the historic character of the cultural landscape.

Concrete Core Stone Faced Masonry Guardwalls

A series of concrete core stone faced masonry guardwalls have been installed along the length of the parkway since 1995 (Figure 20c). These walls have concrete cores covered with a stone masonry veneer. They are higher and more uniform than their historic counterparts, with a consistency of stone size and mortar joints that fails to produce the same rustic appearance that can be found along other sections of the parkway. Recent additions to the parkway and incompatible with the historic character of the parkway, these features include a number of walls along the length of GWMP – North, and are labeled “NC” in Figures 17, 18 and 19. In the northbound direction, they are: Northbound Wall 27N, just south of Turkey Run Bridge; Northbound Wall 28N, north of Turkey Run Bridge; Northbound Wall 33N, flanking Dead Run Bridge; and Wall 1FM, located just off the northbound lanes of the parkway by the access road to Fort Marcy. In the southbound direction, they include: Southbound Wall 1S, flanking Dead Run Bridge; Southbound Wall 5S, to the north and south of Turkey Run Bridge; Southbound Wall 16S, tapering into the ground north of Pimmit Run Bridge; Southbound Wall 17S, located north of Glebe Road Bridge; and Southbound Wall 20S, flanking Donaldson Run Bridge. Finally, walls of this kind also appear in the median between the north- and southbound lanes. Median Wall 12M (located at NB Sta. 675-665 and SB Sta. 165-175; see Figure 19) measures 170 feet long on the northbound side and 180 feet on the southbound side, and tapers into an

earthen berm in the median to the south of Turkey Run Bridge. Median Wall 13M measures 155 feet long on the northbound side and 52 feet on the southbound side, and tapers into an earthen berm in the median north of Dead Run Bridge (Figure 20c).

Un-Numbered Concrete Core Stone Faced Masonry Guardwalls

A series of un-numbered, non-contributing walls with stone facing were noted by this inventory and appear in Figures 17, 18 and 19. Like many of the other concrete core stone faced masonry guardwalls, these were built since 1995. They occur in the northbound direction in the following locations: in between Wall 4N and Windy Run Bridge (or the safety extension of the Windy Run Bridge northbound wing wall), opposite Wall 16S near Fort Marcy (or the safety extension of the Pimmit Run Bridge northbound wing wall), and immediately north of the Route 123 Interchange (see Figures 18 and 19). In addition, three un-numbered, non-contributing walls are located at the CIA Interchange: one median wall runs opposite two guardwalls on the exit and entrance ramps, at NB Sta. 725-705 and SB Sta. 225-205 (near walls 8S and 26N). These are marked “NC” in Figure 19.

Bridge Wing Wall Safety Extensions

A number of the bridges along GWMP – North have had new wing wall safety extensions, median walls, or parapet walls added since the historic period of significance. Due to their more recent addition, these walls do not contribute to the historic character of the parkway. Built with reinforced concrete cores and stone facing, the wing walls generally taper away from the roadway (as occurs at the Turkey Run Bridge), while the median walls are buried in earthen berms on either side of the bridge (as occurs at the Dead Run Bridge). These concrete core stone faced masonry guardwalls, median walls and parapet walls are located at the Lower Level Spout Run Bridge, Spout Run Arch Bridge, Windy Run Bridge, Pimmit Run Bridge, Turkey Run Bridge, and Dead Run Bridge.

Steel-Backed Timber Guardrails

The steel-backed timber guardrails of GWMP – North meet current safety guidelines, and were installed in Turkey Run Park in 2004. Although they do not contribute to the historic character of the parkway, these structures provide a neutral look that blends well with the forested areas of the parkway.

Steel W-Beam Guardrails

In 1997 and 1998, the National Park Service installed steel W-beam guardrails along portions of the median in the north section of the GWMP. These structures were built in places where the variable width median was judged too narrow and therefore at a higher risk for head-on collisions. The median strip beneath them was simultaneously paved with concrete. The installation of W-beam guardrails was considered a temporary measure until the NPS could undertake such appropriate safety measures as blend more effectively with the parkway’s natural surroundings. The present guardrails of this type are located in the median at NB Sta. 725-705 and SB Sta. 205-225, NB Sta. 820-785 and SB Sta. 285-305, NB Sta. 910-825 and SB Sta. 325-415, and SB Sta. 455-480.

Jersey Barrier

Jersey barriers of GWMP – North are found on the Glebe Road, Gulf Branch, Donaldson Run, and Windy Run Bridges, and were installed for safety reasons between 1997 and 2008.

Character-defining Features:

Feature: Lower Level Spout Run Bridge

Feature Identification Number: 136964

Type of Feature Contribution: Contributing

IDLCS Number: 45361

Feature: Spout Run Arch Bridge

Feature Identification Number: 136966

Type of Feature Contribution: Contributing

IDLCS Number: 45360

Feature: Windy Run Bridge

Feature Identification Number: 136968

Type of Feature Contribution: Contributing

IDLCS Number: 45359

Feature: Donaldson Run Bridge

Feature Identification Number: 136970

Type of Feature Contribution: Contributing

IDLCS Number: 45358

Feature: Gulf Branch Bridge

Feature Identification Number: 136972

Type of Feature Contribution: Contributing

IDLCS Number: 45357

Feature: Glebe Road Bridge

Feature Identification Number: 136974

Type of Feature Contribution: Contributing

IDLCS Number: 45356

George Washington Memorial Parkway - North
George Washington Memorial Parkway

Feature: Pimmit Run Bridge

Feature Identification Number: 136976

Type of Feature Contribution: Contributing

IDLCS Number: 45355

Feature: Route 123 Overpass

Feature Identification Number: 136978

Type of Feature Contribution: Contributing

IDLCS Number: 45354

Feature: CIA Overpass

Feature Identification Number: 136980

Type of Feature Contribution: Contributing

Feature: Turkey Run Bridge

Feature Identification Number: 136982

Type of Feature Contribution: Contributing

IDLCS Number: 45353

Feature: Dead Run Bridge

Feature Identification Number: 136984

Type of Feature Contribution: Contributing

IDLCS Number: 45352

Feature: Northbound historic stone masonry guardwalls

Feature Identification Number: 136986

Type of Feature Contribution: Contributing

IDLCS Number: 45367

Feature: Southbound historic stone masonry guardwalls

Feature Identification Number: 136988

Type of Feature Contribution: Contributing

IDLCS Number: 45367

Feature: Median historic stone masonry guardwalls

Feature Identification Number: 136990

George Washington Memorial Parkway - North
George Washington Memorial Parkway

| | |
|--------------------------------|--|
| Type of Feature Contribution: | Contributing |
| Feature: | Original aluminum guardrails of the Spout Run Arch , Pimmit Run, and Windy Run Bridges |
| Feature Identification Number: | 136992 |
| Type of Feature Contribution: | Contributing |
| Feature: | Cast and welded steel guardrails of the Donaldson Run and Gulf Run Bridges |
| Feature Identification Number: | 136994 |
| Type of Feature Contribution: | Contributing |
| Feature: | Seamless steel parapet rails of the Turkey Run and Dead Run Bridges |
| Feature Identification Number: | 136996 |
| Type of Feature Contribution: | Contributing |
| Feature: | Spout Run footbridge |
| Feature Identification Number: | 136998 |
| Type of Feature Contribution: | Non Contributing |
| Feature: | US Park Police D-2 Substation |
| Feature Identification Number: | 137000 |
| Type of Feature Contribution: | Non Contributing |
| Feature: | Two Parkway Headquarters buildings at Turkey Run Park |
| Feature Identification Number: | 137002 |
| Type of Feature Contribution: | Non Contributing |
| Feature: | Two Parkway Headquarters buildings at Turkey Run Park |
| Feature Identification Number: | 137004 |
| Type of Feature Contribution: | Non Contributing |
| Feature: | Northbound concrete core stone faced masonry guardwalls (27N, 28N, 33N, and 3 un-numbered walls) |
| Feature Identification Number: | 137006 |
| Type of Feature Contribution: | Non Contributing |
| Feature: | Southbound concrete core stone faced masonry guardwalls (1S, 5S, 16S, 17S, |

20S)

Feature Identification Number: 137008

Type of Feature Contribution: Non Contributing

Feature: Median concrete core stone faced masonry guardwalls (12M, 13M, and un-numbered median wall at CIA Interchange)

Feature Identification Number: 137010

Type of Feature Contribution: Non Contributing

Feature: Concrete parapet walls of the Route 123 Overpass

Feature Identification Number: 137012

Type of Feature Contribution: Non Contributing

Feature: Steel guardrails of the Glebe Road Bridge

Feature Identification Number: 137014

Type of Feature Contribution: Non Contributing

Feature: Steel-backed timber guardrails

Feature Identification Number: 137016

Type of Feature Contribution: Non Contributing

Feature: Median steel W-beam guardrails (north of Pimmit Run and elsewhere)

Feature Identification Number: 137018

Type of Feature Contribution: Non Contributing

Feature: Jersey barriers (at Windy Run Bridge and elsewhere)

Feature Identification Number: 137020

Type of Feature Contribution: Non Contributing

Feature: Concrete core stone faced masonry guardwalls, median walls and parapet walls at the Lower Level Spout Run Bridge, Spout Run Arch Bridge, Windy Run Bridge, Pimmit Run Bridge, Turkey Run Bridge, and Dead Run Bridge

Feature Identification Number: 137022

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

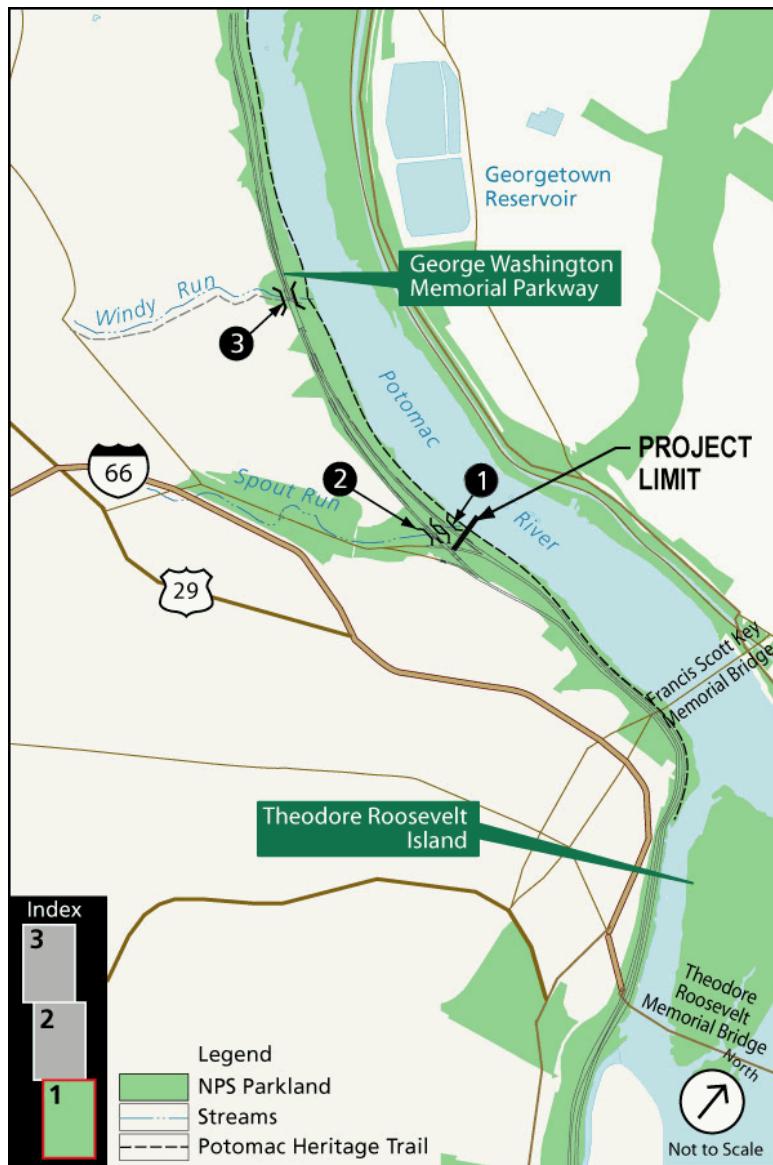


Figure 13. Map showing the southern bridges and culverts including: (1) Lower Level Spout Run Bridge; (2) Spout Run Arch Bridge; and (3) Windy Run Bridge.

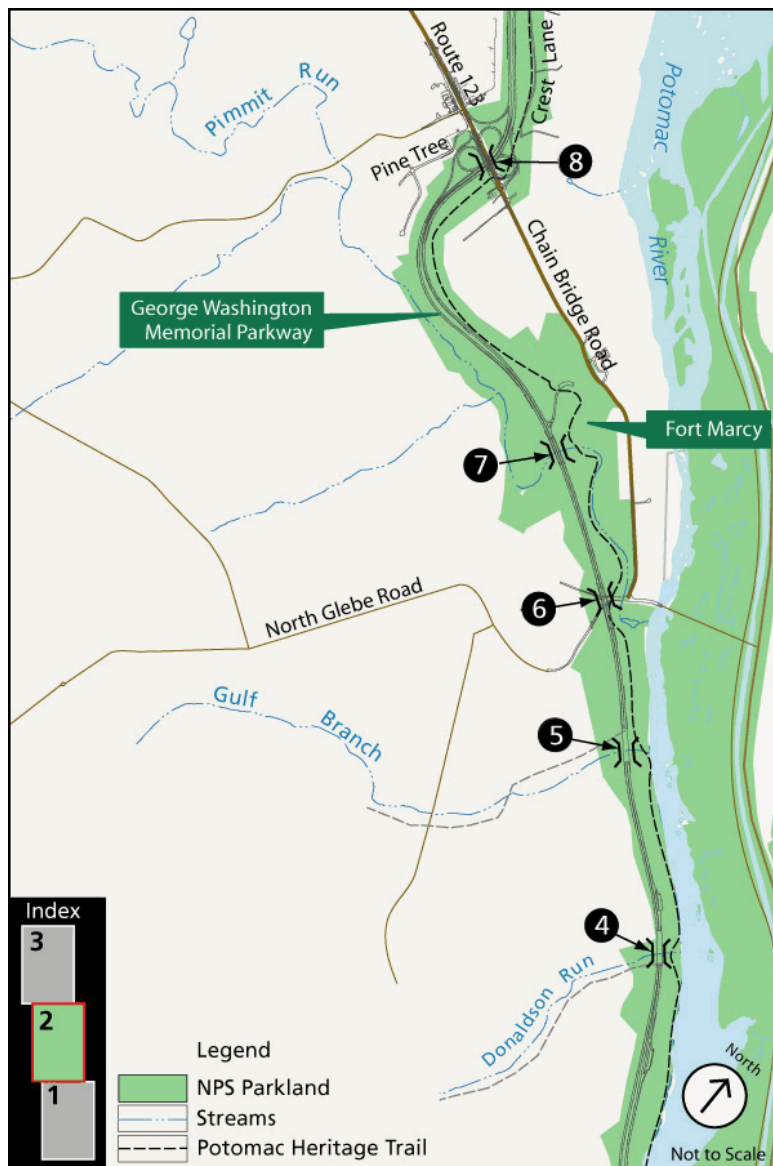


Figure 14. Map showing the central bridges as continued from Figure 13, including: (4) Donaldson Run Bridge; (5) Gulf Branch Bridge; (6) Glebe Road Bridge; (7) Pimmit Run Bridge; and (8) Route 123 Overpass.

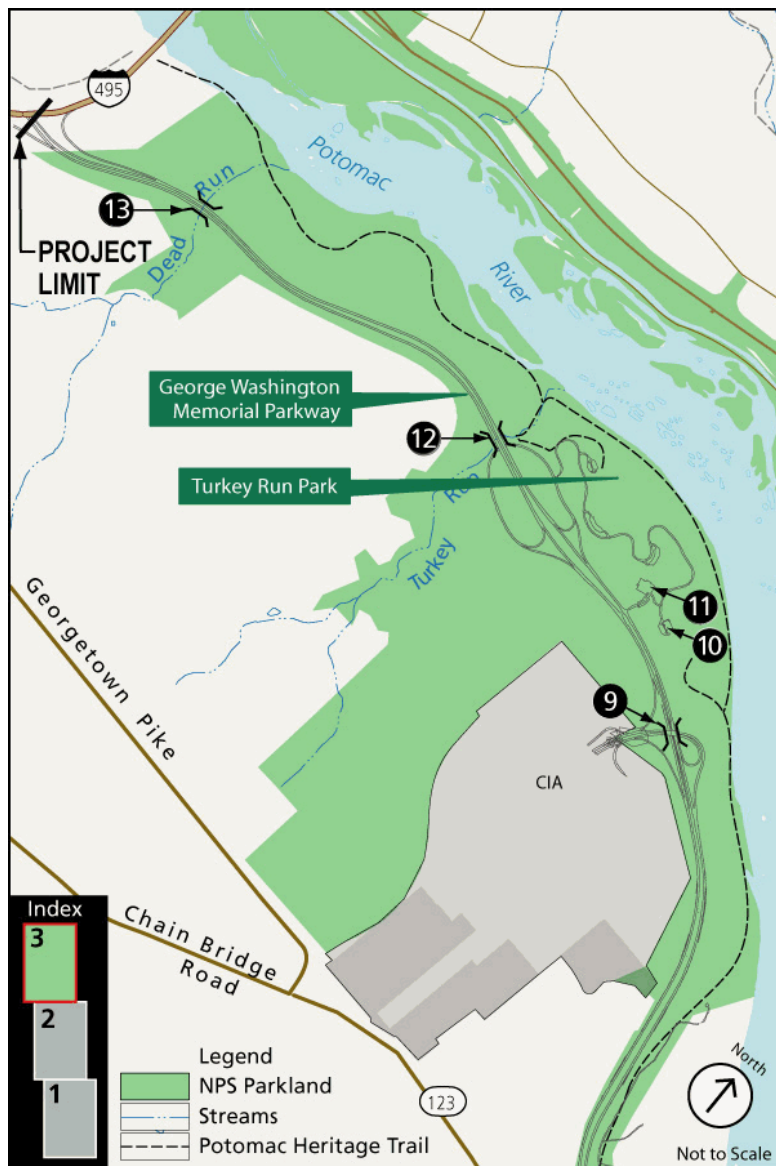


Figure 15. Map showing the northern bridges and buildings of GWMP – North as continued from Figure 14, including: (9) CIA Overpass; (10) Turkey Run Park Headquarters; (11) US Park Police D-2 Substation; (12) Turkey Run bridge; and (13) Dead Run Bridge.



Figure 16. Bridge views: (a) looking west at Lower Level Spout Run Bridge; (b) Windy Run Bridge SB; (c) Donaldson Run Bridge underside looking south; (d) Glebe Road Bridge SB; (e) Pimmit Run Bridge SB (NPS LCS 2007 and NCR CLP 2009).

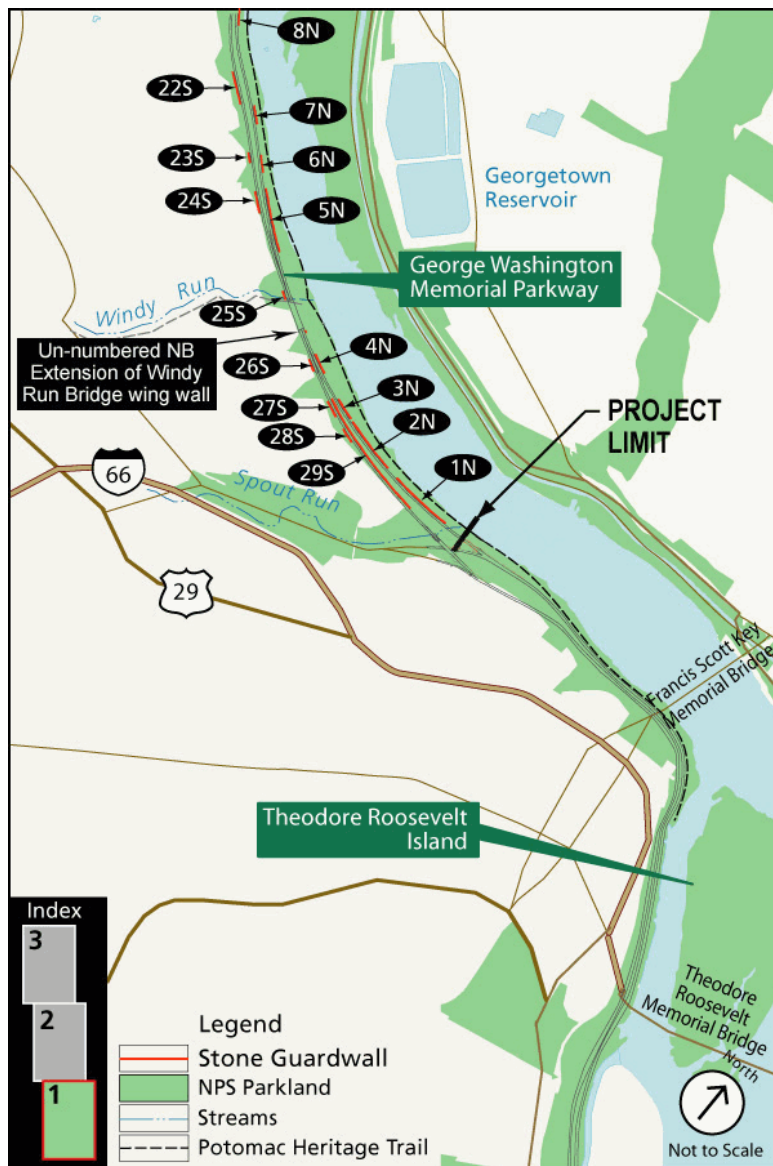


Figure 17. Map of both historic and non-historic stone masonry guardwalls along GWMP – North from Spout Run Parkway to north of Windy Run. Non-contributing walls are marked “NC” (Greenhorne & O’Mara 2008).

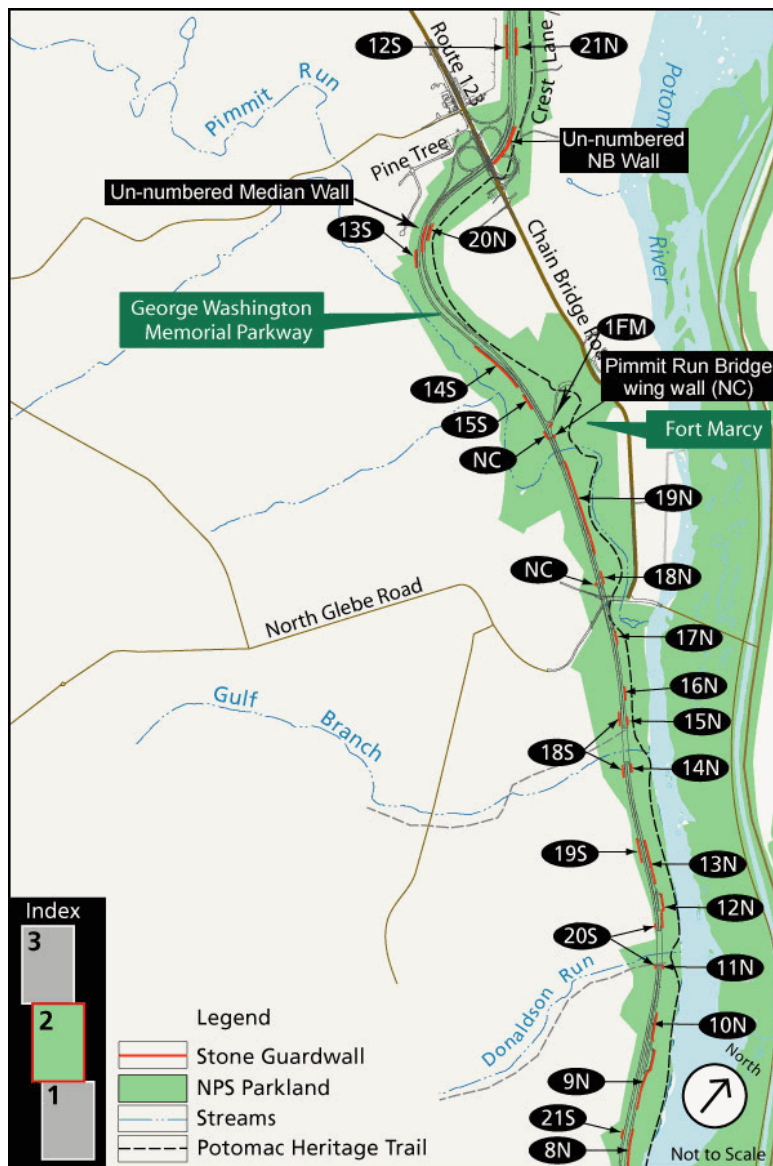


Figure 18. Map of both historic and non-historic stone masonry guardwalls from south of Donaldson Run to north of Route 123, as continued from Figure 17.

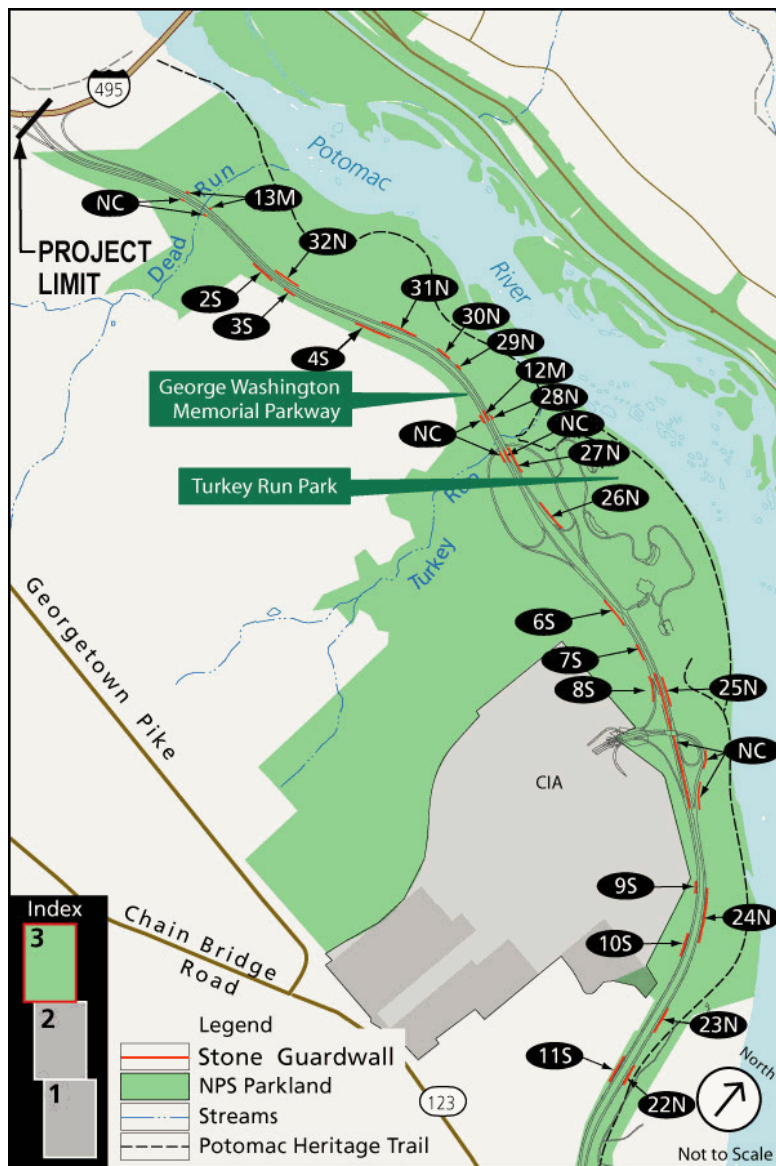


Figure 19. Map of both historic and non-historic stone masonry guardwalls from south of the CIA Interchange to the Capital Beltway/I-495, as continued from Figure 18.

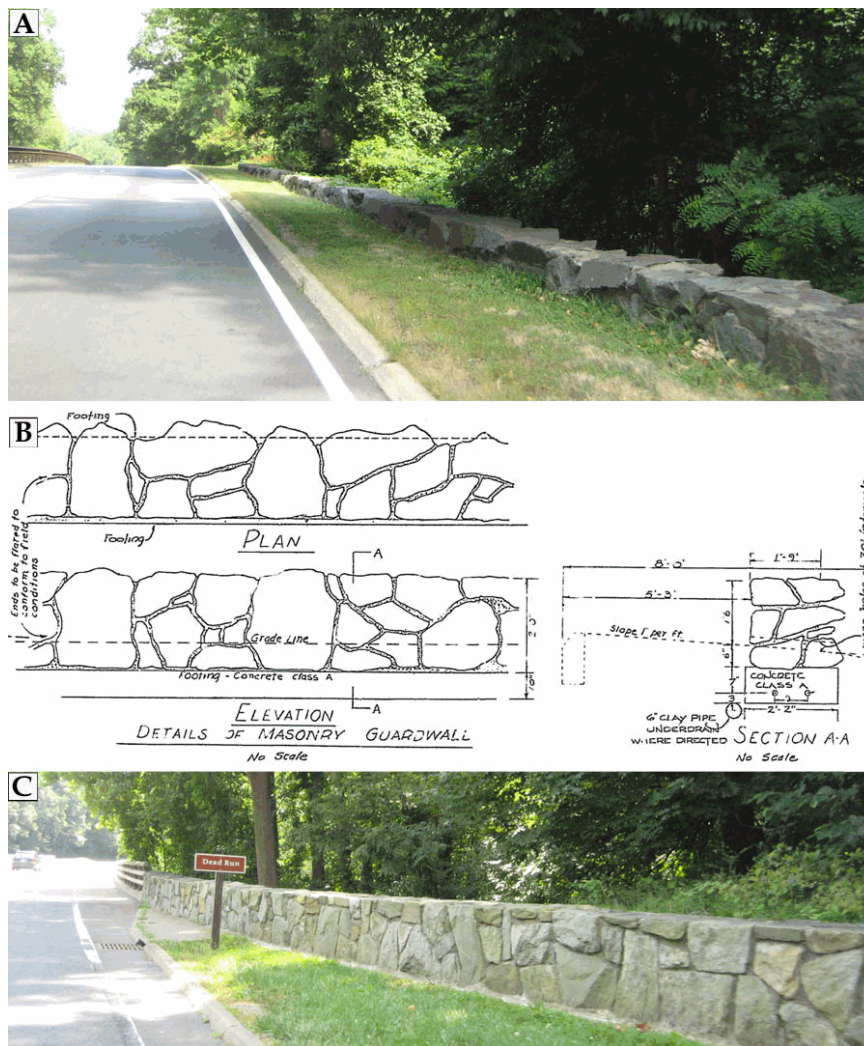


Figure 20. (a) Stone masonry guardwall 17N, north of Gulf Branch Bridge (NCR CLP 2009); (b) The 1961 construction plans for these walls, from the BPR (DSC TIC 850/1417); and (c) Non-contributing guardwall 33N, south of Dead Run Bridge (NCR CLP 2009).

Views and Vistas

Historic Conditions

The views and vistas along the north section of the George Washington Memorial Parkway have long represented one of the most important features of this cultural landscape. As described in a 1959 New York Times article:

“One may want to get on it, a slow, savoring drive from north to south along the full twenty-three mile length of the parkway should be taken by all travelers who come to the Capital by car. It is a tour through history, a drive of Spectacular View. It offers, without question, the most spectacular and unexpected view of Washington of any of the highway approaches to the city for it is a view from a height. The swamps on which Washington was

built end abruptly at just about the point where Key Bridge crosses the Potomac from Georgetown to Rosslyn, on the Virginia side. Above it are high palisades, rising as much as 250 feet above a suddenly narrow, rapid river. It is this heretofore inaccessible area which has been spanned by the parkway extension. The terrain is such that nine bridges – five of them steel – were required to cross the deep ravines of rivulets and runs that empty into the Potomac. Suddenly, for the first time, the public can see Washington from an extraordinary vantage point, with a swift river traveling between high green palisades with the spire of the Washington Monument and the roof of the Lincoln Memorial rising in the distance.” (New York Times 1959)

Thus, since its earliest stages of conception, the parkway was thus envisioned as an unparalleled opportunity to appreciate not only the natural beauty of the Washington, DC area but the majestic heart of the nation’s capital, from a birds-eye view. More specific treatment of the views furthermore played an important role in the early management and maintenance of the parkway. The crucial nature of these vistas to the National Park Service is made clear by a letter sent to a parkway neighbor, in 1950. In it, the NPS advised the property owner, on whose property the park owned a scenic easement, on how to restore the historic view.

“Your tree men will open up the vista toward the Potomac River and the City only to the extent that it originally existed. It will be relatively easy for him to find the original cutting lines on the large trees. It is my understanding that in the matter of selective cutting, you will eliminate the sucker and young weed trees which have grown up over a period of the last few years under your forest canopy. The chain link fence which you proposed to erect will be done on the “restricted” portion of your property following generally the monumented park right-of-way, deviating from it a few feet where topography indicates.” (Edward J. Kelly to G. Grant Mason, August 18, 1950, NPS GWMP files)

The detail with which National Capital Parks Superintendent Kelly addressed this issue conveys the extent to which the views and vistas of the parkway were being designed, during this era.

Existing Conditions

A view is comprised of three components: the foreground, middle ground, and background. A direct relationship therefore exists between the views and vistas and the historic stone masonry guardwalls of the parkway, as well as the surrounding vegetation. Perspectives are frequently anchored by the guardwalls as a primary feature in the foreground, combined with a middle and background view of the Potomac River Gorge. Meanwhile, the vegetation around a vista can serve to frame it on either side or create a canopy that completes the border begun by the historic stone masonry guardwalls beneath the view (Figures 21a and 21b).

A circa 1960s NPS Land Use and Maintenance Plan for the parkway (DSC TIC 850/81524) contains useful terminology for various vistas along the north section of the GWMP (Figure 21c). Therein, views were classified by adapting descriptive terms. They include the following:

an Open View is a panorama and framed vista cleared of woody vegetation in the foreground with an open or wide framed vista to the gorge; a Filtered View is a view in the winter between the tree trunks down to the gorge, with very little understory; and Canopy Views are scenic pullouts with a grove of large canopy trees, possibly pruned or limbed up to open views of the corridor. To these terms one additional view type was added, which is Filtered Views with Open Slots, or larger gaps in the woodland that provide a broader opening to the view of the gorge and beyond that is more noticeable in the winter.

The HAER documentation also discusses four types of parkway views, including: Framed Vista, Panorama, Axial Views (or views down the road corridor), and Scenic Pullouts. The north section of the GWMP includes all of these view types, except for the panorama and axial views, which better describe views found on the MVMH. The great majority of views and vistas can be seen from the north- and southbound lanes between the intersection with Spout Run Parkway and Glebe Road Bridge (Figures 22a, 22b, 23, 24 and 25).

The views and vistas along today's GWMP – North remain one of its most popular attractions, and the characteristic for which it is most praised. Still framed by stone masonry walls and vegetation, sweeping views of the Potomac River Gorge, Georgetown spires and the monumental core of Washington, DC can be glimpsed periodically from the parkway and its bridges. In some spots, vegetation still frames or provides a canopy for views, while clusters in the median help to narrow the cone of vision or create the impression of a forested woodland (see Figure 22a). Conversely, the periodic lack of vegetation in the median exaggerates the depth and width of the parkway corridor, while the absence of foliage in winter can reveal additional views entirely hidden in other seasons (see Figure 22b).

Other visual cues employed to direct the traveler's attention to views include the widening and narrowing of the parkway median, which forces the traveler to focus on either a broad or narrow visual corridor. The use of slopes along the parkway and the location of planted vegetation in the median also direct the eye. Vegetation that arches over the roadway, thereby framing the driving experience, is often present at transitions in the parkway, or tied to the end or beginning of a stone wall. The north section of the GWMP contains several areas that have arching vegetation of this kind over the roadway. Heading northbound, there are two areas south of the South Donaldson Overlook, and five areas between Pimmit Run and the CIA Interchange. The southbound GWMP contains two areas of arching vegetation south of Windy Run, three areas between Windy Run and the South Donaldson Overlook, four areas between Pimmit Run and the CIA Interchange, and three areas north of Turkey Run Park.

Also relating to the quality of views and vistas are the changing land forms of the parkway, from the steep slopes and rolling hills of the north section to the more open stretches just north of Spout Run. The dramatic cliffs and rocky outcrops of this landscape advertise the ingenuity of the parkway itself, as it winds north. A masterpiece of transportation and landscape planning, the roadway's birds-eye views aptly illustrate its use of the natural environment and vegetation to create a true driving experience.

However, as a result of the thickening and maturing of vegetation along the parkway, many of the historically engineered views to the opposite shore and downtown Washington, DC have been either severely limited or entirely obscured. The Washington Monument, Capitol, and the Old Post Office can all be seen from certain vantage points south of the Route 123 Overpass. Yet these iconic vistas are more frequently obstructed by the recently overgrown vegetation in the foreground and midground, particularly in areas with noted open historic views. Huge, historic hardwoods including oak, hickory, maple, elm, and beech were originally intended to frame views as marker trees or to provide a graceful canopy at overlooks and along the parkway itself. However, many of these have today been overtaken by volunteer or invasive vines and other vegetation, while healthy volunteer trees such as princess tree and sumac are growing into the open spaces originally intended for parkway views. In particular, views from the southbound lanes of the monumental core of Washington, DC looking over Walls 6N and 7N, identified as some of the best along the north section of the GWMP, have been either almost (in the case of the view over 6N) or entirely (in the case of 7N) obscured by encroaching vegetation (see Figures 21a and 21b).

The additional development of Rosslyn, Virginia, and the Georgetown and Palisades neighborhoods of Washington, DC has also altered the views from the parkway, as private homes and the buildings of Georgetown University have appeared in a landscape previously dominated by trees. Still, many of the most striking vistas remain, thanks to the preservation of the river shore as a wilderness area and the continuing visibility of the taller historic buildings of downtown DC.

On the whole, since the historic period of significance the vegetation along GWMP – North has grown both larger and denser, and in many cases infringed upon significant views from the parkway. As a result, the views and vistas of this cultural landscape retain a moderate level of integrity, but still contribute to the historic character of the parkway.

Character-defining Features:

Feature: Views from the parkway to the Potomac Palisades, Georgetown, and the Potomac River Gorge

Feature Identification Number: 137024

Type of Feature Contribution: Contributing

Feature: Views from the parkway to the monumental core of Washington, DC

Feature Identification Number: 137026

Type of Feature Contribution: Contributing

Feature: Views from the parkway into the old hardwood forest near Turkey Run Park

Feature Identification Number: 137028

Type of Feature Contribution: Contributing

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Feature: Canopy views along parkway corridor

Feature Identification Number: 137030

Type of Feature Contribution: Contributing

Feature: Views along parkway framed by historic stone masonry guardwalls

Feature Identification Number: 137032

Type of Feature Contribution: Contributing

Feature: Open vista along northbound lanes from Windy Run Bridge, Donaldson Run Bridge, Gulf Branch Bridge, and Glebe Road Bridge

Feature Identification Number: 137034

Type of Feature Contribution: Contributing

Feature: Canopy views along northbound lanes over Wall 8N

Feature Identification Number: 137036

Type of Feature Contribution: Contributing

Feature: Filtered views along northbound lanes over Walls 1N, 2N, 5N, 8N, 9N, 13N, 16N, 17N, and 24N

Feature Identification Number: 137038

Type of Feature Contribution: Contributing

Feature: Filtered views with open slots along northbound lanes over Walls 3N, 4N, 10N, and 13N

Feature Identification Number: 137040

Type of Feature Contribution: Contributing

Feature: Open vistas along northbound lanes over Walls 1N, 2N, 5N, 6N, 7N, 8N, 10N, and 14N

Feature Identification Number: 137042

Type of Feature Contribution: Contributing

Feature: Open vista along southbound lanes from Donaldson Run Bridge

Feature Identification Number: 137044

Type of Feature Contribution: Contributing

Feature: Filtered views along southbound lanes over Walls 1N, 2N, 3N, 4N, 8N, 9N,

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George Washington Memorial Parkway

12N, and 15N

Feature Identification Number: 137046

Type of Feature Contribution: Contributing

Feature: Filtered views with open slots along southbound lanes over Walls 2N, 3N, and 13N

Feature Identification Number: 137048

Type of Feature Contribution: Contributing

Feature: Open vistas along southbound lanes over Walls 2N, 3N, 5N, 6N, 7N, 10N, and 12N

Feature Identification Number: 137050

Type of Feature Contribution: Contributing

Feature: Open vista with some canopy from South Donaldson Scenic Overlook

Feature Identification Number: 137052

Type of Feature Contribution: Contributing

Feature: Canopy view with open slots from North Donaldson Scenic Overlook

Feature Identification Number: 137054

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:

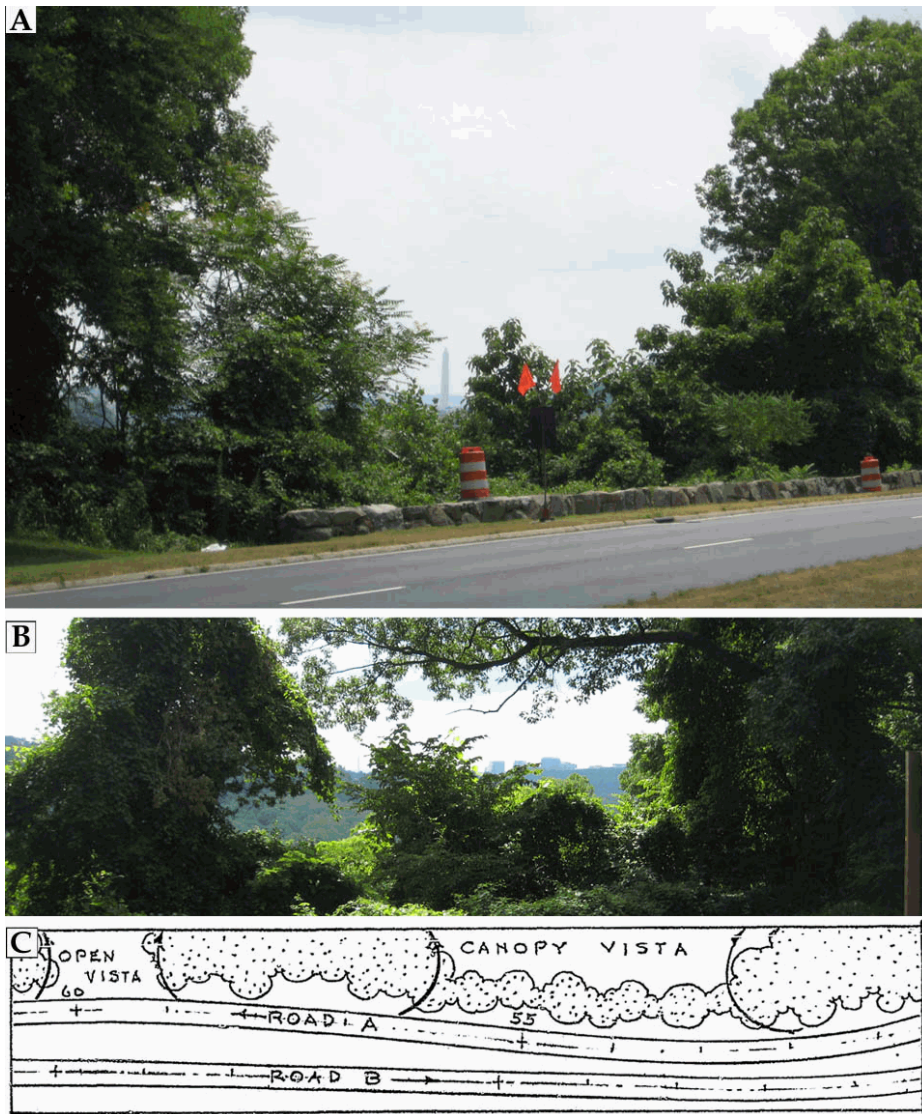


Figure 21. (a) View over wall 6N, designed as an open vista but now overgrown; (b) View from South Donaldson Scenic Overlook, designed to be open with some canopy but now overgrown; and (c) Views diagram from circa 1960s NPS plans (DSC TIC 850/81524).

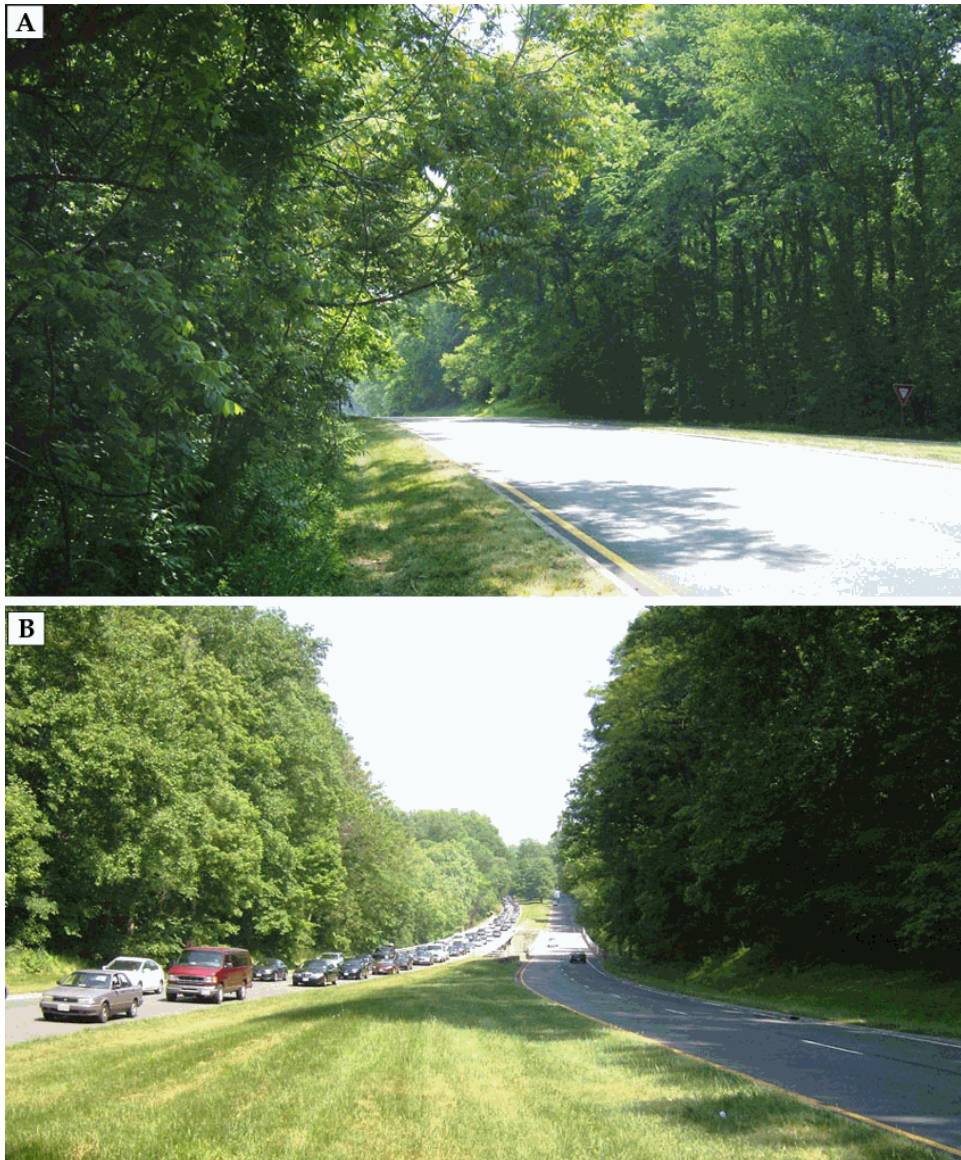


Figure 22. (a) North of Windy Run Bridge, southbound view of the tunnel effect created by roadside vegetation (NCR CLP 2009); (b) View southbound toward Turkey Run Bridge, whose wide vista and grass contrasts with Figure 22a (Greenhorne & O'Mara 2007).

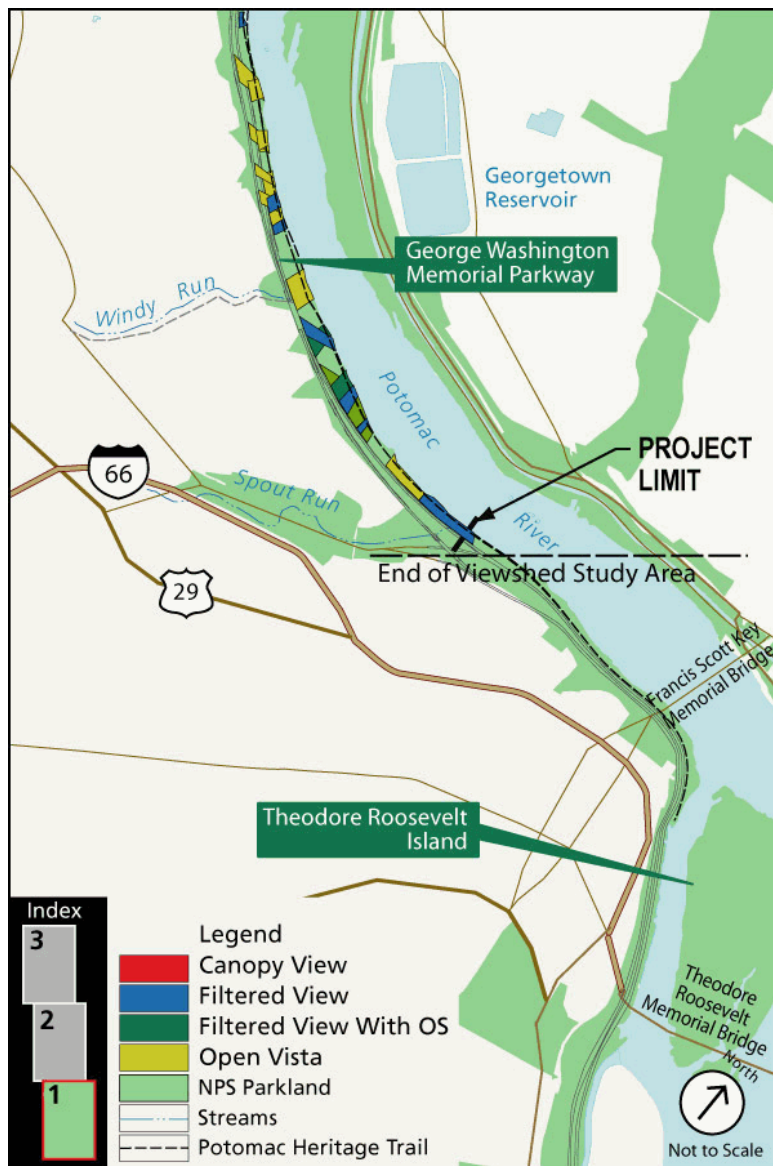


Figure 23. Map showing views and vistas along the south section of GWMP – North.

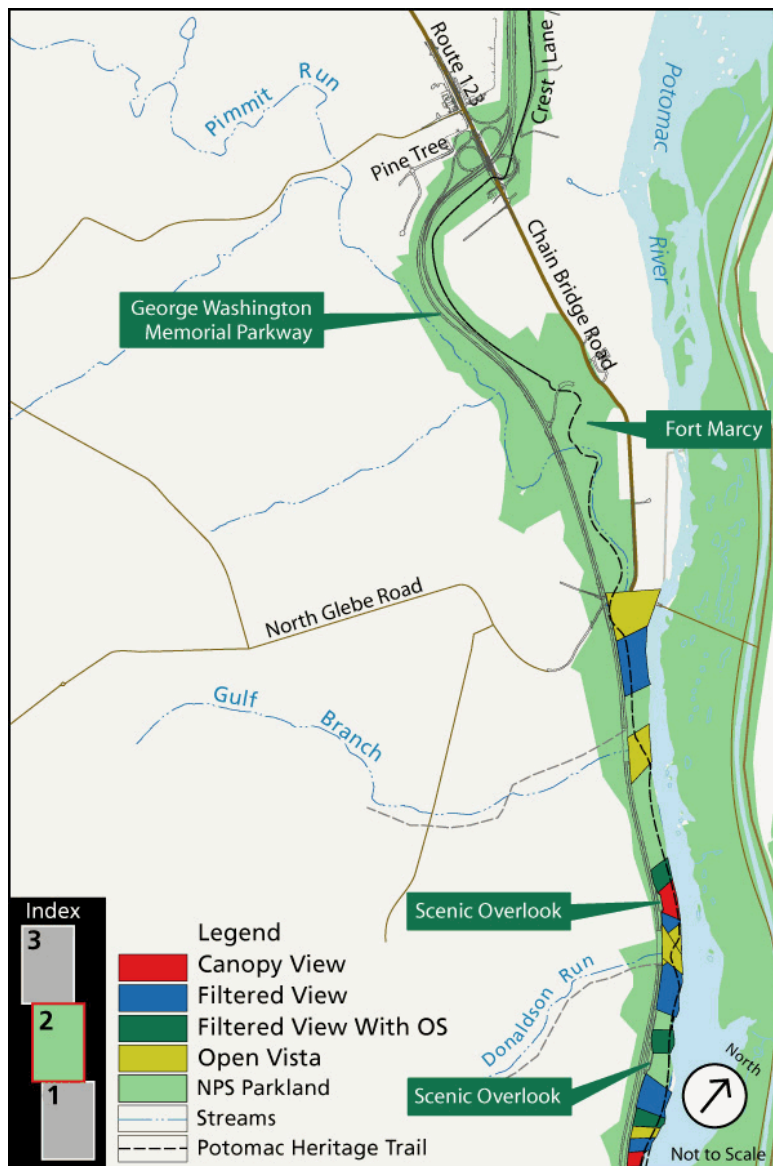


Figure 24. Map showing the views and vistas along the central section of GWMP – North.

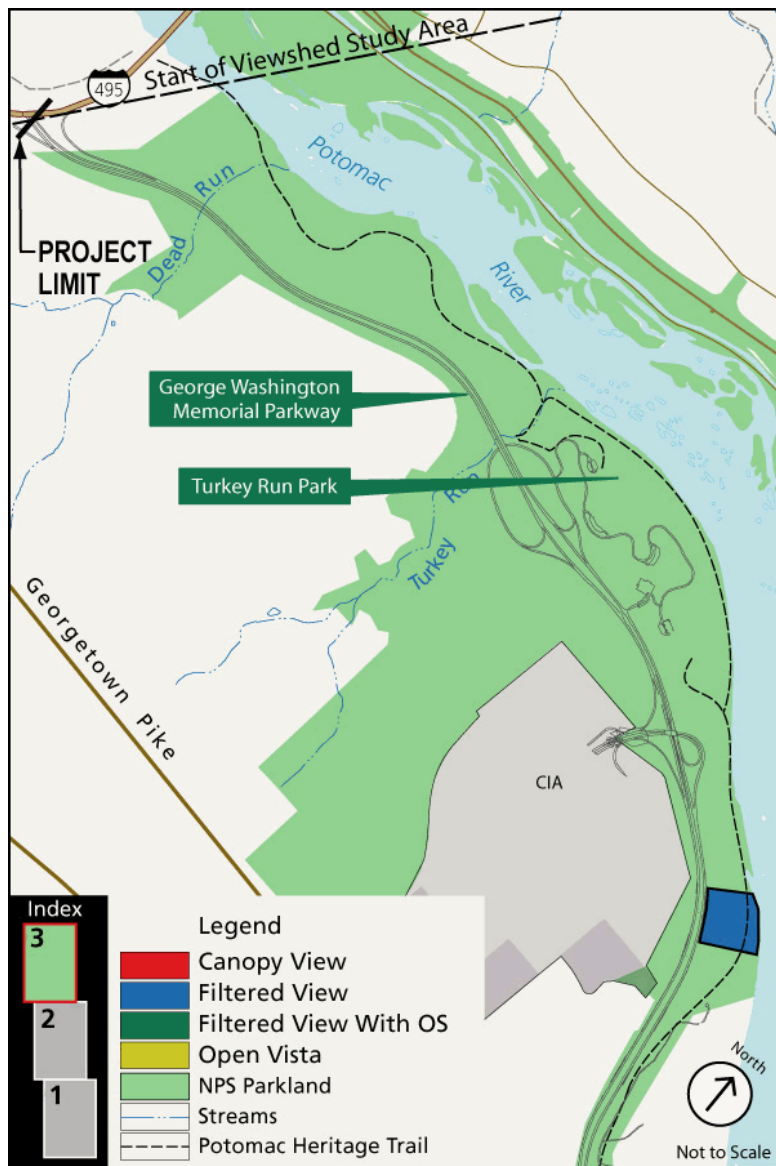


Figure 25. Map showing the views and vistas along the north section of GWMP – North.

Small Scale Features

Historic Conditions

The north section of the GWMP was built with a number of small-scale features, including culverts, curbs, and gutters. These were necessary for the proper drainage of the new parkway, and were installed along with each section of roadway between 1930 and 1963. A wide variety of culverts were constructed along the parkway, ranging from a 12- to 18-inch concrete or corrugated metal pipe design to a reinforced concrete design with spans of 20 feet.

The letter below illustrates the careful attention that the smaller features of the parkway

received, during the historic period of significance. It refers specifically to stone work on the Spout Run Parkway, but more generally represents the overall level of parkway craftsmanship:

“An inspection by Mr. Haussmann (architect) and Mr. Breeze of the stone work on the culvert at Station 124.5 on the east side of the road of Lorcom Lane connection discovered that 5 or 6 granite stones had been inserted on each façade of the structure at random intervals just below the granite capstones. These were not shown on the architectural plans and were apparently introduced in the stone fabricators dimensional drawings that were not reviewed in the architect’s office. The Park Service and the architect were of the opinion that the granite stones immediately under the capstone be removed since they have no architectural justification, they create cross joints with the capstone above, and they detract from an otherwise satisfactory structure. The voids created by the removal of these granite stones would be filled with the Class A local stone with which the bridge is otherwise faced.” (Harry T. Thompson, April 22, 1949, NPS GWMP files)

A subsequent work order addressed this issue directly, and provided for the replacement of the existing granite stones with local stones in the discussed locations (National Park Service to Rogers and McGrath, Inc., May 10, 1949, NPS GWMP files).

The parkway had a number of signs along its length during the period of significance, including speed limit and parking signage (see Cover Image). Various historic documents indicate that Scotch Lite was considered an innovative reflective product when the north section of the GWMP was being constructed, and so may have been used in some of these signs. This material may still exist on some of the parkway’s signage, but the topic requires additional research before any contributing features can be identified.

Existing Conditions

The small-scale features of today’s GWMP – North include culverts, curbs, gutters, signs, and gates.

CULVERTS

As was the case historically, a vast drainage system is associated with the GWMP and its upkeep. The pavement is drained by small combination curb opening and grate inlets, each approximately three feet in length, that extend into the road and are in some cases at a lower elevation than the pavement due to repaving over the years. Water from these curb inlets flows into pipe culvert systems whose outlets empty onto the steep slopes facing the Potomac River and into feeder streams and runs. The roadside and median ditches are drained by field inlets that connect to the same storm drain system (EarthTech 2005). All culverts along the entire GWMP appear on the List of Classified Structures as a group (LCS No. 045368), and those along the north section of the roadway consist primarily of concrete pipes with flared ends.

Most of these historic culverts have been repaired over the years, and the majority consist of corrugated metal pipes that have very little architectural detail outside of their functional operation. The existing features range from 12- to 18-inch concrete or corrugated metal pipe culverts to reinforced concrete culverts with spans of 20 feet. Of the 128 culverts in the north section of the GWMP, only two currently have headwalls with character-defining stone masonry similar to the bridges and walls of the north section of the parkway. The culverts and overall drainage system of GWMP – North therefore retain a low to moderate level of integrity, but still contribute to the historic character of the roadway. A list of the contributing culverts' specific locations can be found in the Supplemental Information Chapter, Appendix C.

SIGNS

There are three main types of signs along GWMP – North: identification, or where you are; directional, or how to get somewhere; and regulatory, or what you should not do. Some examples of National Park Service identification signs include those marking the main entrances to Fort Marcy, Turkey Run Park, and the Parkway Headquarters at Turkey Run Park. Meanwhile, directional signs alert the traveler to various stops along the parkway, including the Donaldson Run Overlooks. Standard traffic signs provide directions and regulations for merge areas, one-way travel, and access to the Capital Beltway/I-495 (see Figure 22a). Although the existence and purpose of these signs is consistent with the character of the historic parkway, their recent construction means that they do not contribute to the historic character of GWMP – North.

GATES

There are several gates along the north section of the GWMP. Gates within Turkey Run Park prevent public access to the Parkway Headquarters during non-office hours. A bar gate blocks the entrance to Fort Marcy to restrict public access to the site after dark. Due to their recent construction, neither of these gate types contribute to the historic character of the parkway.

Character-defining Features:

| | |
|--------------------------------|------------------------------|
| Feature: | Northbound historic culverts |
| Feature Identification Number: | 137056 |
| Type of Feature Contribution: | Contributing |
| Feature: | Southbound historic culverts |
| Feature Identification Number: | 137058 |
| Type of Feature Contribution: | Contributing |
| Feature: | Signs |
| Feature Identification Number: | 137060 |

Type of Feature Contribution: Non Contributing

Feature: Gates

Feature Identification Number: 137062

Type of Feature Contribution: Non Contributing

Archeological Sites

Historic Conditions

The vicinity of Washington, DC, including the Virginia shore of the Potomac River, was used for various purposes by Native Americans before the arrival of European settlers. This area was subsequently settled by others, the archeological evidence of which appears to have been left relatively undisturbed during the historic period of significance.

Existing Conditions

There are numerous archeological sites along the north section of the GWMP, including prehistoric Native American Indian and historic period sites. At present, a total of forty-eight sites have been identified along the parkway corridor. Systematic Phase I archeological surveys were conducted along parts of the parkway in 2005, 2006, and 2007, and identified four new sites. Both prehistoric and historic sites illustrate the continued use of the land for subsistence but also as a transportation route leading north to the Allegheny Mountains. As a result, the archeological sites of GWMP – North retain a high level of integrity, and contribute to the significance of the cultural landscape.

Character-defining Features:

Feature: Forty-eight identified archeological sites

Feature Identification Number: 137106

Type of Feature Contribution: Contributing

Condition

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 09/02/2009

Condition Assessment Explanatory Narrative:

This determination takes into account the cultural landscape condition, which includes the current condition of buildings and structures, natural systems and features, circulation spatial organization, land use, cluster arrangement, topography, vegetation, views and vistas, constructed water features, small-scale features, and archeological sites of the George Washington Memorial Parkway - North. Issues with the roadway surface are exacerbated by failings in the drainage system, which also needs repair. Water spread and/or ponding is a safety concern on the roadway, which drainage repairs could resolve. To raise the condition of the property to “good,” the park should complete the following:

- Repair the drainage system including curbs, gutter inlets, and outfall structures.
- Repair and protect historic stone masonry guardwalls, so as to prevent further deterioration or damage from aggressive vegetation growth.
- Remove invasive plant species from designed views and from the trees along the roadway.
- Thin vegetation along designed vistas to Georgetown, Potomac River Gorge, the Potomac Palisades, and the monumental core of Washington, DC.
- Develop a regular maintenance plan to regulate vegetation growth along the parkway, to minimize the blockage and retain the appearance of Canopy Views, Filtered Views, and Filtered Views with Slots, and determine the limits of adjacent vegetation trimming along open turf areas and road shoulders.

Impacts

Type of Impact: Erosion

External or Internal: Internal

Impact Description: The drainage system along the north section of the GWMP is failing, due to the failure of many of the outfalls, and causing erosion of the slopes beneath the outlets along the parkway. More specifically, the lack of sufficient riprap for the support of outflow has in some cases resulted in the undermining of culvert ends due to erosion. Erosion was also recently noted at the bottom of the north pier on the Pimmit Run Bridge.

Type of Impact: Impending Development

External or Internal: Internal

Impact Description: The Federal Highway Administration (FHWA) is currently proposing safety improvements for the north section of the GWMP. These could potentially involve the removal of historic stone masonry guardwalls, and their replacement with concrete core guardwalls and/or steel-backed timber guardrails whose increased height would block designed views. Planned safety improvements would also include extending acceleration and deceleration lanes, and replacing drainage inlets and culverts. The roadway and ramps would be milled and overlaid, while the southbound side of the Route 123 Interchange would be reconfigured.

Type of Impact: Improper Drainage

External or Internal: Internal

Impact Description: Due to the severe deterioration of many of the outfalls along GWMP – North, the drainage system is failing. Many inlets are broken, sunken, or clogged, and the resulting ponding represents a hazard to parkway drivers during rainfalls. In addition, the majority of the culverts in this section of the parkway were designed with pipe diameters that have proven inadequate in handling the required runoff flows, and do not have trash racks to collect debris that frequently restricts outflow.

Type of Impact: Structural Deterioration

External or Internal: Internal

Impact Description: Due to the everyday heavy use of the parkway, the road surface exhibits potholes, cracks, and settlement. Many of the historic stone retaining walls have loose stones and failing mortar joints, some due to damage from vehicular collisions.

Type of Impact: Vegetation/Invasive Plants

External or Internal: Internal

Impact Description: Invasive and volunteer plants, including a number of vines and shrubs, choke the understory and canopy along the parkway, deteriorating the overall condition of the forest and imperiling views.

Type of Impact: Visitation

External or Internal: Both Internal and External

Impact Description: The north section of the GWMP is used as a commuter route and supports excessive volumes of traffic each day, which leads to rapid wear and deterioration.

Type of Impact: Deferred Maintenance

External or Internal: Internal

Impact Description: Views of the Potomac River Gorge and Washington, DC monumental core are becoming blocked due to rampant successional growth within designated view zones along the parkway. The spalled concrete on the underside of the Pimmit Run Bridge is in need of repair, while rust is evident on the structural steel of the same.

Type of Impact: Vandalism/Theft/Arson

External or Internal: Internal

Impact Description: Graffiti is present on the base of the Pimmit Run Bridge.

Treatment

Treatment

Approved Treatment: Undetermined

Bibliography and Supplemental Information

Bibliography

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Supplemental Information

Title: Appendix A: Vegetation Types Along Immediate Corridor of GWMP – North

Description: Below is a list of vegetation types along the immediate corridor of GWMP – North, and organized according to their presence either before or after the end of the historic period of significance. Immediate corridor refers to the space immediately bordering the grassy shoulders or stone walls of the roadway, and does not include the adjacent woodlands.

Species Documented Before 1963

SHADE TREES

Red maple (*Acer rubrum*)
Sugar maple (*Acer saccharum*)
Tupelo (*Nyssa sylvatica*)
London planetree (*Platanus hybrida*) – Non-native
Northern red oak (*Quercus borealis*)
Scarlet oak (*Quercus coccinea*)
Black oak (*Quercus velutina*)
Pin oak (*Quercus palustris*)
Blue ash (*Fraxinus quadrangulata*)

UNDERSTORY TREES

Shadblow serviceberry (*Amelanchier canadensis*)
American hornbeam (*Carpinus caroliniana*)
Eastern redbud (*Cercis canadensis*)
White fringe tree (*Chionanthus virginicus*)
Flowering dogwood (*Cornus florida*)
Common persimmon (*Diospyros virginiana*)
Hophornbeam (*Ostrya virginiana*)
Black cherry (*Prunus serotina*)
Washington hawthorn (*Crataegus phaenopyrum*)
Japanese flowering crab apple (*Malus floribunda*) – Non-native
Scheidecker crab apple (*Malus scheideckeri*) – Non-native

EVERGREEN TREES

Eastern redcedar (*Juniperus virginiana*)
White pine (*Pinus strobus*)
American holly (*Ilex opaca*)
Virginia pine (*Pinus virginiana*)

SHRUBS

Red chokeberry (*Aronia arbutifolia*)
Gray dogwood (*Cornus racemosa*)
Bloodtwig dogwood (*Cornus sanguinea*) – Non-native
Redosier dogwood (*Cornus stolonifera*)
Silky dogwood (*Cornus amomum*)
American hazelnut (*Corylus americana*)
American witchhazel (*Hamamelis virginiana*)
Northern spicebush (*Lindera benzoin*)
Carolina buckthorn (*Rhamnus caroliniana*)
Glossy buckthorn (*Rhamnus frangula*) – Non-native
Winged sumac (*Rhus copallina*)
Smooth sumac (*Rhus glabra*)
Staghorn sumac (*Rhus typhina*)
Southern arrowwood (*Viburnum dentatum*)
Nannyberry (*Viburnum lentago*)
Softleaf arrowwood (*Viburnum molle*) – Non-native
Blackhaw (*Viburnum prunifolium*)
Linden arrowwood (*Viburnum dilatatum*)
Mapleleaf viburnum (*Viburnum acerifolium*)
American cranberrybush (*Viburnum trilobum*) – Non-native
Kousa dogwood (*Cornus kousa*) – Non-native
Mountain laurel (*Kalmia latifolia*)

Species Documented Only After 1963

SHADE TREES

American elm (*Ulmus americana*)
White oak (*Quercus alba*)
Tulip poplar (*Liriodendron tulipifera*)
Osage orange (*Maclura pomifera*)
Horse chestnut (*Aesculus hippocastanum*)
Magnolia (*Magnolia* sp.)
Cottonwood (*Populus* sp.)

UNDERSTORY TREES

Sweet cherry (*Prunus avium*)

SHRUBS AND VINES

Princesstree (*Paulownia tomentosa*)

Porcelainberry (*Ampelopsis brevipedunculata*)
English ivy (*Hedera helix*)
Poison ivy (*Toxicodendron radicans*)

Title: Appendix B: Stone Masonry Guardwalls of George Washington Memorial Parkway – North (see Figures 17, 18, and 19 for corresponding maps)

Description: The lists below identify the stone masonry guardwalls, both contributing and non-contributing, of GWMP – North. Station numbers used here differ from the rest of the inventory and are drawn from George Washington Memorial Parkway North Section Improvements, a report completed by EarthTech in 2006. Unlike those of the historic stationing, these numbers differ for northbound and southbound lanes. The 2006 stationing of the northbound lanes begins with station number 595.00.00, approximately 1500 feet north of Dead Run Bridge, and ends with station number 1000.00.00 at the Spout Run exit ramp. Stationing for the southbound lanes begins with station number 95.00.00, located 1,600 feet north of the bridge over Dead Run, and ends with station number 500.00.00 at the Spout Run entrance ramp to the GWMP.

STONE MASONRY GUARDWALL LOCATIONS
NORTHBOUND (starting south and heading north)

Spout Run Parkway through Route 123 Interchange (Historic Station 128.50 to 322)

- Wall Number 1N is located at NB Sta. 1005-1000, length 800 feet, height 12 to 20 inches, mortar 2-3 inches, large boulders 25 feet apart.
- Wall Number 2N is located at NB Sta. 1000-990, length 700 feet, height 20 to 24 inches, mortar 2-3 inches, large boulders 15 feet apart.
- Wall Number 3N is located at NB Sta. 995-980, length 300 feet, height 16 inches, mortar 1-2 inches, large boulders 15 feet apart.
- Wall Number 4N is located at NB Sta. 980-970, length 250 feet, height 18 inches, mortar 1-2 inches, large boulders 20 feet apart.
- Un-numbered Northbound Wall (non-contributing) located between Wall Number 4N and Windy Run Bridge. This is the 1999-2002 extension of the northbound wing wall of Windy Run Bridge.
- Wall Number 5 N is located at NB Sta. 960-955, length 825 feet, height 18 inches, mortar 1-2 inches, large boulders 25 feet apart.
- Wall Number 6N is located at NB Sta. 950-945, length 210 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.
- Wall Number 7N is located at NB Sta. 945-940, length 240 feet, height 15 inches, mortar 1-2 inches, large boulders 15 feet apart.
- Wall Number 8N is located at NB Sta. 930-925, length 600 feet, height 18 to 20 inches, mortar 2-3 inches, large boulders 20 feet apart.
- Wall Number 9N is located at NB Sta. 920-915, length 500 feet, height 12 to 20 inches, mortar 2-3 inches, large boulders 35 feet apart.
- Wall Number 10N is located at NB Sta. 915-910, length 360 feet, height 20 inches,

mortar 2-3 inches, large boulders 20 feet apart.
--Wall Number 11N is located at NB Sta. 910-905, length 200 feet, height 15 to 20 inches, mortar 2-3 inches, large boulders 20 feet apart.
--Wall Number 12N is located at NB Sta. 900-895, length 185 feet, height 14 inches, mortar 2-3 inches, large boulders 15 feet apart.
--Wall Number 13N is located at NB Sta. 885-895, length 600 feet, height 18 inches, mortar 2-3 inches, large boulders 20 feet apart.
--Wall Number 14N is located at NB Sta. 880-875, length 65 feet, height 14 inches, mortar 1-2 inches, large boulders 10 feet apart.
--Wall Number 15N is located at NB Sta. 875-870, length 75 feet, height 12 to 18 inches, mortar 2-3 inches, large boulders 15 feet apart.
--Wall Number 16N is located at NB Sta. 875-865, length 165 feet, height 14 inches, mortar 1-2 inches, large boulders 10 feet apart.
--Wall Number 17N is located at NB Sta. 865-860, length 120 feet, height 14 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 18N is located at NB Sta. 860-850, length 120 feet, height 18 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 19N is located at NB Sta. 855-840, length 1095 feet, height 18 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 20N is located at NB Sta. 810-800, length 225 feet, height 20 inches, mortar 1-2 inches, large boulders 30 feet apart.
--Fort Marcy Wall 1FM (non-contributing) is located north of Pimmit Run by the access road to Fort Marcy. It has an "L" shape, length of 36 feet by 12 feet, height of 18 inches, mortar 1 inch, no large boulders.

North End of Route 123 Interchange to South End of CIA Interchange (Historic Station 322 to 385)

--Un-numbered Northbound Wall (non-contributing) located opposite Wall Number 16S and south of Wall Number 21N, immediately north of Route 123 Interchange.
--Wall Number 21N is located at NB Sta. 780-775, length 150 feet, height 20 inches, mortar 1-2 inches, large boulders 15 feet apart.
--Wall Number 22N is located at NB Sta. 765-755, length 260 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 23N is located at NB Sta. 755-750, length 325 feet, height 20 inches, mortar 1-2 inches, large boulders 25 feet apart.
--Wall Number 24N is located at NB Sta. 745-730, length 675 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.

CIA Interchange through Turkey Run Park Intersection (Historic Station 385 to 442)

--Wall Number 25N is located at NB Sta. 715-705, length 400 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 26N is located at NB Sta. 685-680, length 425 feet, height 20 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 27N (non-contributing) is located at NB Sta. 675-665, length 360 feet, height 27 inches, mortar 0-0.5 inches, no large boulders.

North End of Turkey Run Park Intersection to Capital Beltway (Historic Station 442 to 506)

--Wall Number 28N (non-contributing) is located at NB Sta. 670-665, length 45 feet, height 27 inches, mortar 0-0.5 inches, no large boulders.

--Wall Number 29N is located at NB Sta. 665-655, length 65 feet, height 20 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 30N is located at NB Sta. 660-655, length 175 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 31N is located at NB Sta. 655-645, length 450 feet, height 22 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 32N is located at NB Sta. 640-615, length 460 feet, height 20 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 33N (non-contributing) is located at NB Sta. 625-615, length 180 feet south and 50 feet north, height 27 inches, mortar 0-0.5 inches, no large boulders.

STONE MASONRY GUARDWALL LOCATIONS SOUTHBOUND (starting north and heading south)

Capital Beltway to North End of Turkey Run Park Intersection (Historic Station 506 to 442)

--Wall Number 1S (non-contributing) is located at SB Sta. 115-130, length 120 feet north and 165 feet south, height tapers to 27 inches, mortar 0-0.5 inches, no large boulders/throughstones.

--Wall Number 2S is located at SB Sta. 130-135, length 325 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 3S is located at SB Sta. 135-140, length 165 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 4S is located at SB Sta. 145-155, length 800 feet, height 12 to 20 inches, mortar 2-3 inches, large boulders 25 feet apart.

--Wall Number 5S (non-contributing) is located at SB Sta. 165-175, length 85 feet north and 135 feet south, height tapers to 27 inches, mortar 0-0.5 inches, no large boulders.

Turkey Run Park Intersection through CIA Interchange (Historic Station 442 to 385)

--Wall Number 6S is located at SB Sta. 190-200, length 425 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 7S is located at SB Sta. 200-205, length 215 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 8S is located at SB Sta. 205-210, length 325 feet, height 20 inches,

mortar 1-2 inches, large boulders 10 feet apart.

South End of CIA Interchange to North End of Route 123 Interchange (Historic Station 385 to 322)

--Wall Number 9S is located at SB Sta. 220-230, length 150 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 10S is located at SB Sta. 235-245, length 300 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 11S is located at SB Sta. 265-255, length 375 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 12S is located at SB Sta. 270-280, length 585 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

Route 123 Interchange through Spout Run Parkway (Historic Station 322 to 128.50)

--Wall Number 13S is located at SB Sta. 300-305, length 235 feet, height 14 inches, mortar 1-2 inches, large boulders 25 feet apart.

--Wall Number 14S is located at SB Sta. 305-310, length 765 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 15S is located at SB Sta. 320-335, length 210 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 16S (non-contributing) is located at SB Sta. 335-340, length 75 feet, height tapers to 27 inches, mortar 0-0.5 inches, no large boulders.

--Wall Number 17S (non-contributing) is located at SB Sta. 355-360, length 40 feet, height 22 to 27 inches, mortar 0-0.5 inches, no large boulders.

--Wall Number 18S is located at SB Sta. 370-375, length 135 feet north and 125 feet south, height 16 inches, mortar 1-2 inches, large boulders 16 feet apart.

--Wall Number 19S is located at SB Sta. 385-395, length 300 feet, height 18 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 20S (non-contributing) is located at SB Sta. 395-405, length 45 feet, height 20 to 27 inches, mortar 0-0.5 inches, no large boulders.

--Wall Number 21S is located at SB Sta. 425-430, length 150 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 22S is located at SB Sta. 435-445, length 400 feet, height 18 inches, mortar 1-2 inches, large boulders 10 feet apart.

--Wall Number 23S is located at SB Sta. 445-450, length 120 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 24S is located at SB Sta. 450-455, length 250 feet, height 22 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 25S is located at SB Sta. 455-460, length 65 feet, height 16 inches, mortar 1-2 inches, large boulders 20 feet apart.

--Wall Number 26S is located at SB Sta. 470-475, length 175 feet, height 18 inches, mortar 1-2 inches, large boulders 15 feet apart.

--Wall Number 27S is located at SB Sta. 475-485, length 225 feet, height 18 inches,

mortar 1-2 inches, large boulders 15 feet apart.
--Wall Number 28S is located at SB Sta. 480-485, length 200 feet, height 18 inches, mortar 1-2 inches, large boulders 20 feet apart.
--Wall Number 29S is located at SB Sta. 500-475, length 1740 feet, height 20 inches, mortar 1-2 inches, large boulders 20 feet apart. This wall is actually a median wall.

STONE MASONRY GUARDWALL LOCATIONS MEDIAN STRIP

Spout Run Parkway through Route 123 Interchange (Historic Station 128.50 to 322)

--Wall Number 29S (see above) is a median wall that contributes to the historic character of GWMP – North.
--Un-numbered median wall south of Route 123 Interchange, opposite Northbound Wall 20N and immediately north of Southbound Wall 13S.

North End of Route 123 Interchange to South End of CIA Interchange (Historic Station 322 to 385)

CIA Interchange through Turkey Run Park Intersection (Historic Station 385 to 442)

--Wall Number 13M (non-contributing) is located at Dead Run Bridge, length 155 feet on northbound side, 52 feet on southbound side, height tapers to 27 inches, mortar 0 to .5 inches, no large boulders. Tapers into an earthen berm in the median north of Dead Run Bridge.
--Un-numbered median wall (non-contributing) at CIA Interchange, at NB Sta. 725-705 and SB Sta. 225-205 (near walls 8S and 26N).

North End of Turkey Run Park Intersection to Capital Beltway (Historic Station 442 to 506)

--Wall Number 12M (non-contributing) is located at NB Sta. 675-665 and SB Sta. 165-175, length 170 feet on northbound side, 180 feet on southbound side, height tapering to 27 inches, mortar 0 to .5 inches, no large boulders. Tapers into an earthen berm in the median to the south of Turkey Run Bridge.

Title: Appendix C: Historic Culverts of the George Washington Memorial Parkway – North
Description: Historic culverts are present along the entire length of GWMP – North. In addition to the ones listed below, historic culverts were identified at Route 123, Sta. 201 and Sta. 99; CIA Interchange at Stations Sta. 105, Sta. 109, Sta. 112, Sta. 115, Sta. 115; Ramp A at Sta. 13.

HISTORIC CULVERT LOCATIONS – NORTHBOUND

NB Sta.1000, NB Sta. 1004, NB Sta. 609, NB Sta. 609, NB Sta. 615, NB Sta. 636,
NB Sta. 636, NB Sta. 650, NB Sta. 651, NB Sta. 657, NB Sta. 660, NB Sta. 666,
NB Sta. 671, NB Sta. 671, NB Sta. 673, NB Sta. 675, NB Sta. 677, NB Sta. 679,
NB Sta. 681, NB Sta. 709, NB Sta. 711, NB Sta. 713, NB Sta. 731, NB Sta. 735,
NB Sta. 738, NB Sta. 750, NB Sta. 760, NB Sta. 763, NB Sta. 767, NB Sta. 776,
NB Sta. 783, NB Sta. 784, NB Sta. 791, NB Sta. 798, NB Sta. 803, NB Sta. 804,
NB Sta. 836, NB Sta. 842, NB Sta. 845, NB Sta. 849, NB Sta. 851, NB Sta. 854,
NB Sta. 863, NB Sta. 865, NB Sta. 870, NB Sta. 873, NB Sta. 881, NB Sta. 884,
NB Sta. 890, NB Sta. 891, NB Sta. 893, NB Sta. 897, NB Sta. 898, NB Sta. 908,
NB Sta. 914, NB Sta. 915, NB Sta. 915, NB Sta. 919, NB Sta. 921, NB Sta. 922,
NB Sta. 925, NB Sta. 928, NB Sta. 928, NB Sta. 931, NB Sta. 934, NB Sta. 936,
NB Sta. 939, NB Sta. 942, NB Sta. 948, NB Sta. 947, NB Sta.948, NB Sta. 950,
NB Sta. 952, NB Sta. 954, NB Sta. 955, NB Sta. 959, NB Sta. 959, NB Sta. 967,
NB Sta. 974, NB Sta. 976, NB Sta. 978, NB Sta. 981, NB Sta. 984, NB Sta. 988,
NB Sta. 991, NB Sta. 993, NB Sta. 996, NB Sta. 997.

HISTORIC CULVERT LOCATIONS – SOUTHBOUND

SB Sta.118, SB Sta. 119, SB Sta. 125, SB Sta. 131, SB Sta. 131, SB Sta. 151, SB Sta. 155, SB Sta. 169, SB Sta. 182, SB Sta. 195, SB Sta. 198, SB Sta. 201, SB Sta. 203, SB Sta. 206, SB Sta. 224, SB Sta. 233, SB Sta. 243, SB Sta. 260, SB Sta. 276, SB Sta. 278, SB Sta. 308, SB Sta. 310, SB Sta. 313, SB Sta. 316, SB Sta. 320, SB Sta. 322, SB Sta. 325, SB Sta. 327, SB Sta. 331, SB Sta. 405, SB Sta. 464.